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ABSTRACT

This study reports on career and status aspirations of over a thousand children from low income areas in the South and is a follow-up study to a 1969 baseline study involving 1,503 fifth- and sixth-graders and their mothers in three low-income subcultures--rural white Appalachians, rural blacks, and inner-city urban blacks. In 1979, a total of 544 questionnaires were secured. The longitudinal nature of the study means that the educational and occupational information gathered on the same children at grade school age, high school age, and young adulthood can be used to trace the developmental transition of youth and how this relates to their initial achievements in the world beyond high school. The following are among the findings discussed: (1) educational plans are a better index of the children's status aspirations than are occupational plans; (2) in elementary school a very high percentage of pupils aspire to a college degree; (3) by high school age, the proportion aspiring to graduate from college drops considerably; (4) over 30 personal, demographic, or parenting factors are associated with the educational goals of children and youth; (5) there is a marked discrepancy between the educational aspirations of the respondents and their actual educational attainments when they are studied as young adults; and (6) as children, respondents did not have diversified social networks of significant others. Appendices include descriptions of instruments used, summary information on the variables, research procedures manual, and additional research reports. (PS)

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On the Way to Adulthood: Changes and Continuities in the Life Plans Of Low-Income Southern Youth

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Career Projections and Attainments of Low-Income Youth: Changes Over Time

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Preface

The regional research mechanism provided the opportunity to follow population samples from several geographic sections of the Southern Region. This approach permitted a much larger sample and allowed the collection of much more important data than would have been possible otherwise. The three projects on which this bulletin is based were conducted in seven Southern states over a ten-year period. The first project (S-63), "Influences on Occupational Goals of Young People From Three Subcultures in the South," was the baseline study. Data were obtained in 1969 from 1,503 fifth- and sixth-grade chldren (aged 11-13 years) and their mothers in three low-income subcultures — rural white Appalachians, rural blacks, and inner-city urban blacks — plus a small sample of poor urban whites in one state.

In 1975, six years after the baseline study, the youth (now aged 16 to 19 years and typically in the last two years of high school) and a subsample of the mothers were again interviewed. This time we reached about three-fourths of the original sample in six of the seven states. During this phase new samples of fifth- and sixth-graders in the same or comparable schools were obtained. The 1975 phase was an interim project in prepartion for the next regional effort which provided the longitudinal focus. In 1979 a follow-up was initiated through project S-126, "Career Projections and Attainments of Low-Income Youth: Changes Over Time," in which an attempt was made through a mailed survey to recontact all the members of the 1969 baseline sample. A total of 544 questionnaires was secured.

The longitudinal nature of the data base means that the educational and occupational information gathered on the same children at grade school age, high school age, and young adulthood can be used to trace the developmental transition of youth and how this related to their initial achievments in the world beyond high school. This is one of the few longitudinal data bases that includes information from roughly equal numbers of males and females, blacks and whites, which were collected over a ten-year period beginning when members of the sample were at an unusually young age in comparison to the typical studies of the 1960's. It provides extension opportunities for the longitudinal study of the developmental goal attainment process of low-income youth.

Following the publication of this bulletin, numerous journal and station publications based on either pooled regional data, individual station data, or ancillary studies will be forthcoming. Most of the publications will be based upon methods outlined in this bulletin. Therefore, this publication was planned to serve as a reference source for future investigations from the longitudinal data base.

Table of Contents

DIRECTORS AND COOPERATING STATIONS ii

ACKNOWLEDGMENTS iii

CONTRIBUTING STATE PROJECTS AND PRINCIPAL LEADERS iv

PREFACE v

LIST OF TABLES AND FIGURES ix

CHAPTER I. INTRODUCTION AND REVIEW OF LITERATURE 1
Sarah M. Shoffner, Editor

Nature and Focus of the Research 1
Longitudinal Nature of the Projects 2
Summary of Baseline Findings 3
Aspirations and Expectations 7
Occupational Choice Process 10
Gender-Typed Occupational Aspirations 13
Educatinal Goals, Aspirations, Expectations, and Attainment 16
Significant Others 20
Life Satisfaction 23

CHAPTER II. SAMPLE AND PROCEDURES 25
Sarah M. Shoffner, Author

Phase One, Baseline, 1969 25
  Sample Selection 25
  Data Collection 26
Phase Two, Youth Follow-up, 1975 27
  Description of the Sample 27
Phase Three, Young Adults, 1979 28
  Respondent Relocation Procedures 29
  Description of the Sample 32
  Non-Respondents 33
  Progress and Problems 33
Description of the Instruments 35
Coding Operations and Data Storage 38

CHAPTER III. METHODOLOGY 41
Charles H. Proctor, Author

Sample Representativeness 41
Scoring Status Projections and Mental Abilities and Making Cohort Comparisons 41
Analysis of Item Means for a Clustered Sample Design 42
Inferring Mechanisms of Ambition Formation from Correlations 48
Cohort Comparisons 53

CHAPTER IV. FINDINGS 57
Part I—CHANGES AND CONTINUITIES IN OCCUPATIONAL PLANS OF MALES 59
William F. Kenkel, Author

Occupational Plans of Grade School Males 59
Factors Associated with Occupational Aspirations 61
Occupational Plans of High School Boys 64
  Factors Associated with Occupational Plans 66
  Changes in Aspirations and Expectations 67
Occupational Attainment of the Young Adults 71

Part II—CHANGE AND STABILITY IN THE OCCUPATIONAL PLANS OF FEMALES 79
William F. Kenkel, Author

Occupational Plans of Grade School Females 79
Factors Associated with Occupational Aspirations and Expectations 80
Occupational Plans of High School Girls 82
  Factors Associated with Occupational Plans 83
  Changes in Occupational Plans 84
Occupational Attainment of the Young Adults 88
Restricted and Gender-Appropriate Occupational Choices 93
  Explanations for Gender-Typed Occupational Choices 95
Effects of Marriage Plans on the Occupational Plans 99
  Level of Occupational Aspirations-Expectations 100
  Seriousness of Occupational Plans 101
  Occupational Knowledge 102
  Perceived Rewards and Costs in an Occupational Role 103
  Perceived Rewards and Costs of Homemaker Only Role 103

Part III—EDUCATIONAL ASPIRATIONS AND EXPECTATIONS OF RURAL LOW-INCOME YOUTH 107
Lawrence B. Schiamberg, Author

The Educational Plans of Grade School Children 107
Factors Related to Educational Aspirations and Expectations at Grade School 109
Educational Plans of High School Students 111
Factors Associated with Educational Plans at the High School Level 111
Educational Attainment of Young Adults 116

Part IV—SIGNIFICANT OTHERS FOR THE LIFE PLANS OF LOW-INCOME BLACK AND WHITE YOUTH 125
Gary W. Peterson and Mary Elizabeth Stivers, Authors

Introduction 125
Procedures 127
Results 127
  Significant Others for Occupational Plans 127
  Significant Others for Fertility and Marriage Plans 130
  Race Comparisons for Significant Others 132
  Gender Comparisons for Significant Others 134
Summary and Discussion 135

Part V–SATISFACTION WITH LIFE CONDITIONS AT EARLY ADULTHOOD 145
  Sarah M. Shoffner, Judith C. Boyd, and M. Cynthia Farris, Authors

Educational Satisfaction 145
  Overall Educational Satisfaction 145
  Satisfaction with Aspects of High School Education 146
  Perceived Barriers of Education 148
Occupational Satisfaction 149
  Overall Occupational Satisfaction 150
  Satisfaction with Aspects of Present Job 150
  Comparison of Perceptions about Present and Jobs 152
  Barriers to Occupational Attainment 154
Satisfaction with Life Plans and Circumstances 156
  Satisfaction with Housing, Living Arrangements, and Residential Locale 156
  Marital Happiness 157
  Perceptions of Life Plan Attainment 158
  Comparison of Perceptions about Past, Present and Future Life 158
Conclusions 159

CHAPTER V. SUMMARY, CONCLUSIONS, AND IMPLICATIONS 163
Summary and Conclusions 163
  Male Occupational Plans and Attainment 163
  Female Occupational Plans and Attainment 164
  Educational Plans and Attainment 166
  Significant Others and Life Plans 167
  Satisfaction with Life Conditions 168
Implications 169

APPENDIXES

Appendix A. Description of Instruments Used 175

Appendix B. Summary Information on the Variables 193

Appendix C. Research Procedures Manual 203

Appendix D. Additional Research Reports 209

LIST OF TABLES/FIGURES

Table — Page

1 Subculture, Gender and State Distribution of Baseline Subjects 28

2 Distribution of Longitudinal Sample for Three States by Reason for Non-Responses 34

3 Status Projections of Three Cohorts of Fifth-Sixth Grade Students in Three Low Income Southern Subcultures by Sex (Sample Sizes in Parentheses) 44

4 Correlations among Status Projections and Mental Ability Scores for Three Cohorts by Subculture and Sex 46

5 Mean Frequency of Usage of Methods of Looking for Work by Subcultures 48

6 Things that Kept the Respondent from Getting the Jobs Wanted 49

7 Satisfaction with Aspects of Respondents' High School Education 50

8 Means, Standard Deviations and Sample Sizes for Thirteen Variables from the Longitudinal Sample 51

9 Inter-Variable Correlations Adjusted for Schools among Thirteen Variables from the Longitudinal Sample 52

10 Changes in Fifth-Sixth Grade Children's Scores on a Number of Variables Related to Aspirations over Three Cohorts 53

Figure

1 Procedure for Locating Respondents 30

TABLES WITHIN SEPARATE PAPERS IN CHAPTER IV

Part/Table — Page

1.1 Occupational Aspirations and Expectations of Grade School Boys, by Race 60

1.2 Factors Associated with the Occupational Aspirations and Expectations of Grade School Boys 62

1.3 Occupational Aspirations and Expectations of High School Aged Boys, by Race 65

1.4 Factors Associated with the Occupational Aspirations and Expectations of High School Boys 67

1.5 Differences in Occupational Aspirations and Expectations of Males from 1969 to 1975, by Race 68

1.6 A Comparison of Percentages of Males Naming Occupational Aspirations at Grade and High School Levels 70

1.7 A Comparison of Percentages of Males Naming Occupational Expectations at Grade and High School Levels 71

1.8 The Occupational Attainment of Presently Employed Young Adult Males 72

1.9 Percent Black Males Naming Occupational Level at Grade and High School and Adult Attainment 73

1.10 The Occupational Aspirations of Grade School Males by Adult Attainment 75

1.11 The Occupational Aspirations of High School Males by Adult Attainment 76

2.1 Occupational Aspirations and Expectations of Grade School Girls, by Race 80

2.2 Factors Associated with the Occupational Aspirations and Expectations of Grade School Girls 81

2.3 Occupational Aspirations and Expectations of High School Girls, by Race 83

2.4 Factors Associated with the Occupational Aspirations and Expectations of High School Girls 85

2.5 Differences in Percentages in Occupational Categories for Aspirations and Expectations of Females from 1969 to 1975, by Race 86

2.6 A Comparison of the Percentages of Females Naming Occupational Aspirations at Grade and High School Levels 87

2.7 A Comparison of the Percentages of Females Naming Occupational Expectations at Grade and High School Levels 88

2.8 The Occupational Attainment of Presently Employed Young Adult Females 89

2.9 Percent Females Naming Occupational Level at Grade and High School and Adult Attainment 90

2.10 The Occupational Aspirations of Grade School Females by Adult Attainment 91

2.11 The Occupational Aspirations of High School Females by Adult Attainment 92

2.12 The Occupational Expectations of High School Females by Adult Attainment 93

2.13 Longitudinal Occupational Aspirations of Females by Gender-Type of Occupation 94

2.14 Modal Occupational Choices of Females at Elementary and High School Levels 95

2.15 Male-Female Differences in Factors Related to Occupational Aspirations 97

2.16 Expected Age at Marriage of Black and White Girls 100

2.17 Occupational Aspirations and Expected Age at Marriage of High School Girls 101

3.1 Educational Aspirations and Expectations of Grade School Boys and Girls by Race (Percent) 108

3.2 Factors Associated with Educational Aspirations and Expectations of Grade School Boys and Girls 110

3.3 Educational Aspirations and Expectations of High School Boys and Girls by Race (Percent) 112

3.4 Correlation Coefficients for Factors Associated with the Educational Aspirations and Expectations of High School Boys 113

3.5 Correlation Coefficients for Factors Associated with the Educational Aspirations and Expectations of High School Girls 114

3.6 Educational Attainment of Young Adults 117

3.7 A Comparison of Educational Aspirations at Grade and High School Age 118

3.8 A Comparison of Educational Expectations at Grade and High School Age 119

3.9 A Comparison of Educational Apirations at Grade School Age with Adult Educational Attainment 121

3.10 A Comparison of Educational Aspirations at High School Age with Adult Educational Attainment 122

4.1 Percentages and Period Comparisons of Significant Other (SO) Choices for Occupational Plans in Early Adolescence, and Early Adulthood of White Male and Female Youth 128

4.2 Percentages and Period Comparisons of Significant Other (SO) Choices for Occupational Plans in Early Adolescence, and Early Adulthood of Black Male and Female Youth 129

4.3 Percentages and Topic Comparisons of Choices of Significant Others (SOs) for Occupational Plans Versus Fertility (Number of Children) and Age of Marriage Plans of Male and Female Youth at Late Adolescence by Race 131

4.4 Percentages and Race Comparisons of Choices of Significant Others (SO) for Occupational Plans in Early Adolescence, Late Adolescence, and Early Adulthood by Race for Male and Female Youth 133

4.5 Percentages and Race Comparisons of Choices of Significant Others (SOs) for Age of Marriage Plans and Fertility Plans in Late Adolescence (1975) by Race for Male and Female Youth 134

4.6 Percentages and Gender Comparisons of Choices of Significant Others (SOs) for Occupational Plans in Early Adolescence, Late Adolescence, and Early Adulthood of White Youth 136

4.7 Percentages and Gender Comparisons of Choices of Significant Others (SOs) for Age of Marriage and Fertility Plans of White Youth 137

4.8 Percentages and Gender Comparisons of Choices of Significant Others (SOs) for Occupational Plans in Early Adolescence, Late Adolescence, and Early Adulthood of Black Youth 138

4.9 Percentages and Gender Comparisons of Choices of Significant Others (SOs) for Age of Marriage and Fertility Plans of Black Youth 139

5.1 Overall Satisfaction with Education 146

5.2 Satisfaction with Aspects of High School Education 147

5.3 Perceived Barriers to Education 149

5.4 Overall Occupational Satisfaction 151

5.5 Satisfaction with Aspects of Present Job 152

5.6 Comparison of Perceptions about Present Job and Future Jobs 153

5.7 Perceived Barriers to Job Attainment 155

5.8 Satisfaction with Housing, Living Arrangements, and Residential Locale 157

5.9 Marital Happiness 158

5.10 Perceptions of Life Plan Attainment 159

5.11 Comparison of Perceptions about Past, Present, and Future Life 160

APPENDIXES

A.1 Summary of Instrument Components for Three Phases of the Longitudinal Study 177

B.1 Acronyms, Brief Descriptive Information and Scoring on Baseline Phase Variables 194

On the Way to Adulthood: Changes and Continuities in Life Plans Of Low-Income Southern Youth

CHAPTER I
INTRODUCTION AND REVIEW OF LITERATURE

by
Sarah M. Shoffner

"What are you going to do when you grow up?" "I'm going to be...." Frequently, these phrases are heard during the child and teen years as young people grapple with the educational-occupational choice-decision making process on the way to adulthood. Although much research has been done on the status projections (a term that refers to occupational and educational aspirations and expectations) for the high school and young adult years, little has been done to study the changes and continuities in the life plans of youth from fifth grade through the years beyond high school. When compared to traditional research on the career attainment process, the projects on which this report is based represent a thrust in several new directions. Since 1967 these research efforts focused specifically on low-income youth from deprived groups. Starting with considerably younger children, the research procedures included interviewing the children's mothers, experimenting with social intervention in the career process, and following the sample members over a period of time during which two reinterview waves were carried out. This process enabled longitudinal analysis and indepth study of the developmental goal attainment process.

Nature and Focus of the Research

Underlying the youth status projections research is the implicit assumption that aspirations and expectations are predictive, in some degree, of actual attainment in adult life and that there is a patterned status attainment process which begins in childhood and might be subject to social intervention if we understood it better (Haller and Miller, 1963). However, there have been few longitudinal studies which have tested the relation of aspiration to attainment, and the process has mostly been inferred from one-time studies (Kuvlesky and Bealer, 1967; Kuvlesky, 1969). Of course there is a theoretical basis for assuming a link between projections and attainment, in the contention of McClelland (1953) and others that aspiration is an essential component in a person's motivation to achieve, operating somewhat like a self-fulfilling prophecy. This is buttressed by functional theory that sees division of labor and varying status levels as necessary and desirable and the aspiration-attainment process as a functional "sorting out" to fill necessary status-roles (Davis and Moore, 1945). On the other hand there is Merton's theory

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Parts from Coleman, A. L. Status projections of low-income youth in the U.S.A.: Changes over time and a look to the future. Paper prepared for the Fourth World Congress of Rural Sociology.

of anomie or deviance deriving from the gap between societal expectations and one's means to achieve them (Merton, 1957).

Most of the research on status projections has been carried out during a period when the communications and civil rights revolutions have been lessening the isolation of rural and deprived people and increasingly immersing the youth of these groups in national norms and lifestyles. This has presumably enhanced self-concepts, broadened horizons, and raised expectations among them. These societal changes, plus the normal time lag between data collection and analysis and publication, have made it difficult to cumulate and codify the findings of the disparate studies and, in the case of the few longitudinal studies, to tell how much change over time is due to the maturation of youth and how much societal changes are reflected during the period.

Until a few years ago most of the status projection and attainment research by rural sociologists was concentrated in the Midwestern states and involved mainly white middle-class high school students. Because of the nature of the rural Midwestern population few blacks or poverty-stricken youth were included, and when the sample consisted of youth in the later years of high school some of the more deprived youth were automatically excluded because they were no longer in school. Moreover, most of the studies focused largely or entirely on boys, on the implicit assumption that careers and status attainment are more important for males, or that the status of females is determined by that of their husbands.

In the last 20 years, career research has spread to the South and other regions and other categories of youth have been included. The studies described in this bulletin are different in a number of respects from most of the earlier studies and may help fill in some of the gaps in our knowledge. The studies were planned and conducted by sociologists and child development specialists in seven Southern states.

Longitudinal Nature of the Projects

The first project (S-63), "Influences on Occupational Goals of Young People From Three Subcultures in the South", was the baseline study in which data were obtained in 1969 from 1,503 fifth- and sixth-grade children (aged 11-13 years) and their mothers in three low-income subcultures--rural white Appalachians, rural blacks, and inner-city urban blacks--plus a small sample of poor urban whites in one state. As a part of this first project, an experimental phase was carried out in 1971, in which subsamples of mothers in each of the states were involved in a series of lesson-discussions on helping their children with career planning, with before and after reinterviews of both mothers and children to see if any change in career knowledge, attitudes, or practices had been effected.

In 1975, six years after the baseline study, the youth and a subsample of the mothers were again interviewed, reaching about three-fourths of the original sample in six of the seven states. At this time the youth were aged 16 to 19 years and typically in the last two years of high school, though some had graduated and substantial numbers had dropped out before high school graduation. Even though one state's sample of 210 subjects was not recontacted, interviews were available from 946 of the original sample. During this phase new samples of fifth- and sixth-graders in the same or comparable schools were obtained. This provided the basis for studying two kinds of changes: societal changes as reflected in the comparative responses of children of the same age and socioeconomic status at two times, and the combination of maturational and societal change as reflected in the answers of the same youth six years apart. The 1975 phase was an interim project in preparation for the next regional effort which provided the longitudinal focus.

In 1979 a follow-up was initiated through project S-126, "Career Projections and Attainments of Low-Income Youth: Changes Over Time," in which an attempt was made through a mail survey to recontact all the members of the 1969 baseline sample. Only 946 respondents had been recontacted in 1975, it was believed, however, that a portion of the original group could be recontacted in 1979. An attempt was made through a tracking process to locate as many of the original respondents as possible. Based on a potential sample of 1,291, a total of 544 questionnaires was secured for a 42% reponse rate.

Unlike most of the status projection and attainment research previously conducted primarily with Midwestern, white middle-class male high school students, this study focused specifically on youth from three low-income subcultures in seven of the Southern states. Respondents were questioned at an unusually early age in comparison to the typical studies of the 1960's. For these reasons, the large and unique data base developed in S-63 and S-126 is well suited for addressing issues related to occupational goals and attainment over time. The longitudinal nature means that the educational and occupational information gathered on the same children at grade school age, high school age, and young adulthood can be used to trace the developmental transition of youth and how this related to their initial achievements in the world beyond high school. This is one of the few longitudinal data bases that has included information from roughly equal numbers of males and females, blacks and whites, which were collected over a ten-year period beginning when the sample were fifth and sixth graders. It provides extensive opportunities for longitudinal analyses in the study of the developmental goal attainment process.

Summary of Baseline Findings

The research reported in later chapters of this bulletin focuses on some of the changes which occurred in the life plans of the sample over the ten-year span. Several comparisons are made between grade school and high school with the major emphasis being placed on the young adult years. In order to balance the focus on aspirations and attainment and to provide the reader with a baseline knowledge of the results of the initial study, some of the major findings from the first project are summarized briefly below.

The overall research questions guiding the baseline study could best be stated as follows: What is the level and nature of ambition and motivation to achieve among youth in these low-income subcultures? What factors are related to varying degrees of ambition, and to what extent may children's career thinking and planning be influenced by group sessions with their mothers?

Occupational aspirations of the 1,503 deprived youth were about as high as those of other youth from all levels of living. Thus, being deprived did not seem to markedly depress aspirations. Similarly, more than half the children aspired to education beyond high school level. Boys and girls were dissimilar in occupational aspirations in that boys gave a wider range than did the girls. Rural youth had significantly lower aspirations than did urban youth. Girls planned to achieve higher educational levels than did boys.

Mothers tended to project lower aspirations than did their offspring; however, both mothers and children were oriented toward professional, technical, or managerial level careers. Mothers tended to project higher occupational aspirations for sons and lower educational aspirations for daughters.

There was a higher agreement for mothers than for children between projected occupational and educational status, especially for boys. This may be due to the specific occupations most often mentioned by mothers as they differed from those named by their sons. The mothers favored "teacher", "doctor", and "engineer", whereas the boys more often favored "athlete", "policeman", or "race driver". Mothers and their daughters both named "nurse", "teacher", and "secretary" most often.

Studies by multiple regression methods of the relationships between status projections of the child and numerous other variables showed different paths of influence for occupational and educational projections. Mother's occupational projections for child, mother's behavioral values for child, and child's reports of talks with parents about plans were the factors having direct effects on the child's occupational projection. Socio-economic background and measured intelligence has relatively modest indirect effects which were mediated by mother's occupational status projections for the child. The child's educational status projection, on the other hand, was dependent upon direct effects from the child's academic motivation, child's measured intelligence, and mother's educational status projection. Relatively pronounced indirect effects from child's self-concept, mother's child-rearing behavior, child's measured intelligence, and socioeconomic background were mediated by child's academic motivation and mother's educational status projection for the child. More detailed findings concerning the interrelationships of the study variables follow.

Mother's achievement motivation had an indirect effect on the child's aspirations. Mother's achievement strivings seemed to work their way through a demanding and loving approach to child rearing for sons and through the vision of an ideal child as one who has character. Also, the mother's values as indicated by her anomie scores were only spuriously related to the educational and occupational status projections of her children.

The children's perceptions of the behavior of their mother toward them, her goals for them to be outgoing persons and to have character, and the extent of mother-child communication were analyzed for relationships with the child's aspirations. (Child-rearing practices were measured by the children's answers to the Bronfenbrenner Parent Behavior (BPB) scale. Questions were included on mother-child communication.) The mother's behavior, as perceived by the child, affected the child's educational aspirations through the influence of her behavior on the child's self-concept. Loving and demanding behavior on the part of the mother influenced the child's self-concept positively while punishing behavior had a negative effect. Degree of communication also had an influence on self-concept but this played a lesser role. The mother's behavior was also related to the child's academic motivation and to parent-child discussions about future plans. The mother's goals for an outgoing child with character directly influenced the child's occupational projections.

Family characteristics such as household size, no husband, being on welfare, the mother's age and social participation, exposure to the outside world, voter participation, and educational and occupational levels of parents showed relatively little influence on the child's aspirations. Yet, background or family characteristics rather strongly influenced the mother's educational projections for their children, particularly for girls. It also influenced their occupational projections for their sons but not for their daughters, possibly because of the narrow range of occupations which mothers foresaw for their daughters. These influences of family background scores seemed consistent with the often-noted tendency for a certain amount of inter-generational transmission of relative socio-economic status even in such an open and merit-oriented society as the United States.

Household size had an influence in some sub-cultural groups. There was fairly strong negative influence on the occupational status projections of urban black boys and on the educational projections of urban black girls, but it is not clear why these groups--and only these groups--should be so affected. The feeling that a large household makes college attendance less likely was somewhat widespread among the subjects, especially the mothers. Age of the mother had a rather strong positive influence on the mother's achievement values among rural white mothers only.

Being on welfare exerted considerably more influence on other variables among rural whites than among the blacks and was greater for girls and their mothers than for boys and their mothers. This may have been due to the fact that there were more blacks than whites on welfare and therefore possibly less stigma attached to it by the blacks. Being on welfare was negatively related to the mothers' achievement values among rural whites and had a weak relationship for black subjects. Mothers receiving welfare had higher anomie scores than did non-recipients. Welfare status, in general, depressed educational and occupational projections.

Lack of husband in the home, most frequently reported among the urban blacks, had no "across the board" influence on any of the variables including the aspirations of the subjects. The girl's occupational-expectations were elevated in the mother-only households. This suggests that greater interest in the work world may develop in girls who see their mothers having to manage alone.

The subjects completed the Otis-Lennon Mental Ability Test, a scholastic aptitude test and the scores were used to analyze relationships with aspirations. IQ scores were directly related to the children's educational aspirations in most groups but to occupational goals only in the urban setting. IQ was positively related to the mothers' aspirations for both the educational and occupational future for their children and mother's aspirations for their offspring in turn strongly influenced the children's goals.

Self-concept is suspected of having a spurious relationship with occupational status projections due to the reduction in the partial regression coefficient as family characteristics are included as additional independent variables. These findings tended to dispute theories which explain the origin of occupational status projections in terms of more generalized personality characteristics supportive of status strivings such as self-concept. For children of this age and sub-cultural background, such apparent correlations may be explained by the presence of more common basic causes. Further analyses suggested that self-concept tended to be raised by attention from mother to child such as shown by loving and demanding aspects of child-rearing and constructive communication. A raised self-concept tended to stimulate the child's academic interests while the child's liking of academic activities tended to elevate his educational status projections.

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REVIEW OF LITERATURE

edited by
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Educational and occupational pursuits, the influence of particular significant others, and satisfaction with chosen roles are prominent aspects in the life plans of rural youth. Much of the early literature on career status projections and the occupational choice process was written by sociologists who studied white, middle-class high school males in midwestern states. More recently, investigators from various disciplines have studied minority groups, females, and youth from low-income families, but there have been few longitudinal studies of any of these populations. This report represents such an attempt, and the chapters which follow include findings and discussions about changes and continuities in the plans of a sample of Southern youth who were studied over a ten-year period.

The review of literature that follows includes highlights of prominent studies related to the longitudinal project. These topics are included: aspirations and expectations, career studies, and rural youth; the occupational choice process; gender-typing of occupational aspirations; educational goals; the role of significant others; and satisfaction with life conditions. The references appear at the end of each section.

Aspirations and Expectations*

The achievement theme espoused in this country implies the doctrine of the "American dream." Although it was previously believed that aspirations of low-income groups needed to be raised, currently some investigators believe that limited achievements of the disadvantaged are primarily the result of limited opportunities and lack of job knowledge, not limited aspirations (Southern Regional Technical Committee for Family Life, 1973, 1974).

Definitional controversies exist in the literature in reference to aspirations and expectations. Differentiation in terms of "idealistic" and "realistic" may be too simplistic. Several investigators, notably Haller (1968), have come to the conclusion that both aspirations and expectations are within the ideal realm. Aspirations represent the extent of assimilation of cultural values, while expectations indicate the extent to which cultural values are modified by perception of expectations of significant others or by perception of barriers to the attainment of the idealized status. Expectations may not necessarily be more realistic.

Contributors indicated in each section of the review of literature.

*Contributor: Lois E. Southworth. Parts from Kuipers, J. L., Southworth, L. E., & Reed, H. M. (1979). Occupational and educational goals of rural Appalachian children and their mothers. Knoxville: The University of Tennessee, Agricultural Experiment Station.

One purpose of longitudinal investigation is to determine the extent to which status projections lead to planning and attainment, particularly for low-income youth and their parents. Ginzberg, Ginsburg, Axelrad, & Herma (1951) and Super (1953) proposed that in occupational choice persons progress through stages of fantasy, tentativeness, and realism. These were seen as corresponding to life stages of preadolescence, early adolescence, and early adulthood. But one of the problems brought out by attempts to confirm this developmental theory, and other theories of vocational choice, is the lack of appropriate mechanisms for communicating occupational knowledge.

Most research in the past dealing with the occupational choice process and ultimate career choices has been concerned primarily with high school boys (e.g., Bachman, Green, & Wirtanen, 1971). However, a recent study that included both sexes (Gallup Youth Survey, 1977) found that 72% of the teenagers intended to go to college. Although 70% of the boys planned to go to college, the top career choices were traditional blue-collar trades such as mechanic, carpenter, electrician and plumber. Engineering was second, the legal profession third, teaching fourth, and professional athlete fifth. For females, secretary was first, teacher second, nurse third, other medical fourth, and veterinarian fifth. Gallup stated that the findings underscored the general lack of serious attention given to the important decisions young people make about their careers, as well as the absence of information about the training and abilities required, rewards offered, and competition for various jobs and professions.

Kelso (1975) found that anticipated stage of leaving school was significantly related to realism of vocational choices; that IQ exercised a complicated mediating effect on both vocational-choice attitude and realism, and that in general both attitude and realism were linearly related to anticipated grade of leaving school. This largely confirms Ginzberg's theory of linearity of the vocational development process. But Kelso emphasized the need for further research on factors likely to be associated with atypical or discontinuous patterns of vocational development, such as socioeconomic level and parental work history.

In a review of the literature of the disadvantages rural youth experience, Edington (1970) concluded that college and occupational aspirations of rural youth were lower, that they had more trouble getting a permanent job, and that their jobs were not as skilled or highly paid as those of non-rural youth. In the rural environment the range of occupational types was limited and few white collar jobs were represented. Thus, the youth from rural areas did not develop attitudes, desire, or motivation to achieve occupational success in white collar jobs. Varied findings on educational aspirations of farm youth were attributed to differences in socioeconomic levels of farmers in different sections of the country. In some rural areas there was a lack of emphasis on formal education and youth did not hold education as a dominant value. Also, adequate occupational information, counseling, appropriate technical-vocational training, and other needed services (Baumheier, Derr, & Gage, 1973; Schwarzweller, 1976; Severinson, 1967; Sher, 1978) to stimulate the youth are often lacking in rural schools. Oftentimes these schools cannot afford to provide such services, particularly when such programs continue to be financed mainly by local property taxes which may provide an inadequate source of revenue.

In a study of rural Appalachian young people, girls and their mothers tended to name the traditional employment options of teacher, nurse, and secretary. Forty-six percent of the boys and 67% of the girls aspired to professional-technical employment although only 15% of the civilian national labor force held employment in this category (Southworth & Kuipers, 1976). Many low-income families recognize the importance of training and/or higher education. However, they also believe they do not have much control over circumstances that allow them to provide such opportunities (Nelsen & Frost, 1971; Stevic & Uhlig, 1967). Thus, there has been increasing interest in measuring aspects of resignation and anomie in low-income rural families and the resulting implications for social action endeavors (Alix & Lantz, 1971; Polansky, Borgman, & Saix, 1972).

To summarize, most young people--independent of socioeconomic factors and education--probably pass through career developmental stages of fantasy, tentativeness, and realism based on correcting experiences. However, one important correcting experience may be geographical location in that studies reviewed here indicated that industrialization related positively to higher education and white collar professions. Where economic opportunities are limited, as in rural Appalachia, expectations are depressed even though reports of aspirations of elementary and high school youth reflect the larger cultural values for education and professional careers.

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Occupational Choice Process*

The occupational choice process has been the focus of considerable attention, initially from sociologists, and more recently from researchers from a wide range of disciplines who have focused on such diverse populations as minority groups, females and youth, especially from low-income families. Few however, have studied any of these populations longitudinally.

In a highly technological society such as the United States where occupational specialization is the rule rather than the exception, occupational choice has become an increasingly complicated and crucial decision. With over 20,000 occupations listed in the Dictionary of Occupational Titles, the occupational choice process for American youth, who must balance the myriad of choices with personal and environmental limitations, presents a formidable hurdle in their developmental process. For most, the choice of an occupation is the difference between satisfaction and frustration experienced in adult years.

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Kuvlesky and Bealer (1966) established what they considered an accurate definition for the occupational choice process which was considered to include an individual's aspirations. A conceptual distinction was made between aspirations and expectations. Expectations signified the individual's probable attainment; whereas, aspirations referred to the psychological preferences or desires an individual has concerning work status. Aspiration is composed of two main components: orientation toward some social object and evaluation of the goal object itself. Generally, the orienting element can be distinguished from the goal object on the basis of strength or desire for a specific goal.

It should be noted that factors such as race, sex, economic circumstances and family background are considered outside the realm of an individual's control and are differentiated from psychological preferences. Aspiration itself is not an efficient predictor of eventual attainment (Kuvlesky and Bealer, 1966). However, the importance of conceptualizing occupational choice in terms of aspiration may provide a clearer explanation for variations in attainment over time. Over the course of their development, individuals change their occupational goals (Ginzberg, Ginsburg, Axelrad & Herma, 1951). The direction of change has generally proceeded in a downward direction. Using Kuvlesky and Bealer's definition, the changes that occur in occupational choice may only be the difference in desire for specific attainment and not necessarily a lowering of the value of the goal object.

Ginzberg et al. (1951) and Super (1957) have proposed theories of occupational choice which have focused on the total developmental process of an individual. Both theories proposed that an individual moves through three stages of occupational choice--fantasy, tentativeness and realism--that correspond with life stages of preadolescence, adolescence and adulthood. Ginzberg et al. identified four major areas which influence occupational choice: (a) social and economic, (b) educational, (c) emotional needs and desires, and (d) individual values.

Using Ginzberg's developmental framework, Super (1953) identified a number of important psychological variables that influence the attainment process. Although an emphasis was on self-concept, other variables such as IQ, value orientation and structural or fixed variables were included. By enlarging the focus of occupational choice over the entire life span of the individual, Super suggested a continuous process rather than a final stage in occupational development.

A major step in the identification of variables influencing the choice process and model building for prediction, was the work of Blau and Duncan (1967). In contrast to Ginzberg's and Super's emphasis on social-psychological factors as major components influencing the occupational choice process to the exclusion of structural variables, Blau and Duncan focused on structural variables only. Further investigation of occupational choices has suggested that modeling, in terms of predicting and delineating variables that influence the choice process is actually a combination of social psychological factors and structural elements (Hall, 1979; Kuvlesky, 1970; Slocum, 1966).

Most individuals seem to share a general consensus about prestige levels of occupations. The differences in attainment that do appear to exist between socioeconomic classes are assumed to be the consequence of structural and social-psychological barriers to attainment. Realizing that structural and social-psychological factors may have variable influence over time (Blau & Duncan, 1967; Sewell et al., 1969; Backman, O'Malley, & Johnston, 1978), an important emphasis in this project was to determine how major predictor variables changed over time in their influence on occupational goals.

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Gender-Typed Occupational Aspirations*

In American society, there is a pronounced gender-typing of occupations with the result that most people "know" which jobs are feminine, which are masculine, and which may appropriately be filled by either men or women. Gender-typing is reflected in occupational choices and preferences beginning early in life. Papalia and Tennent (1975) found that the occupational preferences of preschoolers were highly gender-specific. Hewitt (1975) found that gender-typing of occupations was prevalent among six-year-olds, whereas Siegel (1973) discovered pronounced gender-typing in the occupational choices of second-grade boys and girls. Gender-typing of occupations has been found among older children and adults as well. Frye and Dietz (1973) found that ninth graders responded in a gender-specific manner to the occupational roles of women; Dunne (1980) found gender-typing of occupations in a study of the aspirations of rural high school students and Albrecht (1976) found the same phenomenon among college students. Brito and Jusenius (1978) studied women aged 14 to 24 years of age and asked what they planned to be doing at age 35. The vast majority of women saw themselves in feminine jobs. In a random sample of Utah adults (Albrecht, Bahr, & Chadwick, 1977) from 60 to 75% of the respondents agreed that certain jobs were suitable for men only and others were suitable for women only. Gender-typing of occupations thus begins early in life and persists through adulthood. The pervasive nature of this phenomenon perhaps accounted for Marr's (1975) finding that such typings resist change despite direct efforts to correct them.

Despite the pervasive nature of gender-typing of occupations, differences have been found with regard to the degree of such typing. This means that we cannot be sure that a specific category of the population gender-types to the same degree as does some other category. In addition, research findings on differences in gender-typing of occupations are not always consistent. Shinar (1975), for example, concluded that males and females agree on which occupations are masculine and which are feminine, while Albrecht et al. (1977) and Dunne (1980) found less gender-typing among women than men. Social class differences have been reported by Albrecht et al. (1977) and Brito and Jusenius (1978), with the higher the social class or educational level the less the gender-typing of occupations. This is consistent with the findings of several studies that the higher the status aspirational levels of young people the lower is their tendency to gender-type occupations (Albrecht et al., 1977; Dunne, 1980; Sibbison, 1974).

Several studies have found that the tendency to gender-type occupations decreases with age, at least when dealing with children and adolescents (Albrecht et al., 1977; Garrett, Ein, & Treiman, 1977; Shepard & Hess, 1975; Umstot, 1980). When dealing with occupational choices, however, the shifts in occupational aspirations have been found to be in the directions of both males and females moving toward "gender-appropriate" occupations. Finally, there is some evidence of a reduction in the tendency to gender-type occupations. Ditkoff (1970) found that contemporary adolescents showed less agreement with gender-specific statements concerning women's occupational roles than did a comparable sample of adolescents studied five years earlier.

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The literature that has been reviewed has dealt with two general types of research on gender-typing of occupations; one was concerned with attitudes towards occupations, typically measured by expressions of which jobs are considered masculine and which feminine. A second type was concerned with the degree of gender-typing reflected in the occupational choices of young people. Both types of research have found that occupational gender-typing is prevalent in American society and, at the same time, that there are differences within society with regard to such typing. The pervasive nature of occupational gender-typing constitutes a restriction on the occupational choices of young women.

Related to women's preferences for gender-appropriate jobs is the tendency for girls and young women to limit their choices to a narrow range of jobs. A number of studies have found that girls typically aspire to a small number of occupations while boys choose from a wider variety of jobs (Douvan & Adelson, 1966; Marini & Greenberger, 1978; Sewell & Orenstein, 1964). Indeed, four specific occupations, nurse, teacher, secretary, and social worker, have been found to dominate the occupational choices of girls. In a study of second graders, Seigel (1973) found that 70% of the girls said they wanted to become a nurse or a teacher while the boys in the same class chose from among 20 different occupations. Prediger, Roth, and Nolth (1974) made a nationwide study of eleventh graders and found that more than half of the girls chose jobs that fell into three job categories: ed-ucation and social services, nursing and human care, and clerical-secretarial. In a study of young Southern, white women, Falk and Salter (1978) found that 60% of them foresaw themselves in the occupations of nurse, school teacher, stenographer, or beautician. Brito and Jusenius (1978) studied the occupational choices of young women who expected to be working at age 35. Among the white women who had attended college or planned to do so, 60% wanted employment in three areas: teaching, health services, and clerical work. Among those who did not intend to go to college, one in three of those who anticipated working at age 35 expected to be a clerical worker.

There is thus considerable evidence that girls and women make their occupational choices from a narrow range of occupations and that they tend to name gender-appropriate jobs. Clearly, there is need for a study that seeks to explain how such occupational attitudes are acquired.

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Educational Goals, Aspirations, Expectations and Attainment*

The importance of education in the occupational process has been substantiated in a number of studies (Bachman, O'Mally, & Johnson, 1978; Blau & Duncan, 1967; Jencks et al., 1972; Jencks et al., 1979; Sewell, Haller & Portes 1969). In our society, education is an important factor in upward social mobility, because spending time in school instills attitudes and behaviors which are valued by employers. Consequently, occupational attainment is usually a reflection of prior educational achievement (Blau & Duncan, 1967; Jencks et al., 1972; Jencks et al., 1979).

When used as an independent variable in research models, education has been identified as a major predictor of subsequent occupational attainment (Bachman et al., 1978; Blau & Duncan, 1967). The logic for this direct relationship includes the recognition that many occupational roles have educational prerequisites. Another explanation may be that the educational process certifies that individuals are adequately socialized in the intellectual capacities and personal characteristics necessary for performing occupational roles (Porter, 1976).

As a dependent variable, education seems to be influenced by such structural and social-psychological variables as gender, significant other influence, IQ, and social class (Bachman et al., 1978; Sewell et al., 1969). The effects of these variables upon educational attainment is reflective not only of students' mental abilities, but also of how well they have internalized the attitudes and role behaviors that are valued by society (Porter, 1976).

Most of the studies of educational aspirations simultaneously have dealt with occupational aspirations. The two concepts appear inseparable in that the goals of adolescents are often closely related to their occupational aspirations. In assessing the plans of a sample of students, Bachman (1970) found that frequently a student's reason for pursuing a college education was to qualify for a specific occupation. Bachman concluded that occupational and educational aspirations are not only highly correlated, but exhibit similar relationships with a variety of structural and social-psychological characteristics (family background, intellectual ability, self-concept, etc.).

The area of educational and occupational expectations and aspirations has been the focus of a wide range of study. Recent studies have indicated the importance of familial factors in the development of the adolescents' orientations. Family background including factors such as socioeconomic level, family size (number of siblings), family cohesion (broken homes), religious affiliation, race, political preference, and even community size have been found to be related to an adolescent's attitude toward school, as well as their educational and occupational aspirations (Crowley, 1982; Bachman et al., 1978).

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The nature and importance of family socialization processes and particularly parental influence have been highlighted by several studies. During the preadolescent and adolescent years of an individual's life, for example, parents are perceived as important influences on educational plans (Peters, Peterson & Southworth, 1981; Stroup, 1980). Given the many obstacles and limitations that low-income families face and the realities of restricted employment opportunities in Appalachia, parents may socialize children for lower educational attainment. Parents, in this case, develop expectations for their children's achievement based on evaluations of their children's abilities and chances for success. They also communicate these expectations to their children who, in turn, incorporate parental expectations into their personal selection processes. Osborn (1971) found that the educational level of parents, especially of the same-sex parent, was significantly related to the educational aspirations of youth. Williams (1972), in his longitudinal study of the educational aspirations of Canadian youth, found that parents exerted the greatest influence over time upon the development of the educational aspirations of their children. Williams also noted the effect of maternal orientation. Regardless of an adolescent's sex, race or socioeconomic status, maternal orientations were found to be prime determinants of their expectations and aspirations (Brook, Whiteman, Lukoff & Gordon, 1979).

Socioeconomic level, whether measured with some index or scale, or by parental occupation and education, family income, wealth or other factors, is directly related to educational and occupational aspirations. Bachman (1970) concluded that socioeconomic level is important in shaping ability. After controlling for ability, however, socioeconomic level had a positive impact on performance, aspirations, school attitudes, and self-concept. In short, within each level of ability there is considerable advantage in having a better family background.

It has been shown previously that low-income rural youth usually have lower aspirations and expectations than middle- and upper-income groups from urban areas (Tittle, 1981). These differences become more pronounced as youth mature and become more realistic about their chances for success. Middle- and upper-income youth realize they have skills and resources for higher attainment. Low-income youth on the other hand, become cognizant of the many obstacles to attainment they face and gauge their future plans accordingly (Kenkel, 1981; Peters, 1983).

Although family factors are important for predicting educational attainment, one other factor of primary importance in the development of educational aspirations is intellectual ability. Bachman et al. (1978) asserted that ability is the best single predictor of educational attainment, and has the strongest direct effect on educational outcomes.

Besides family background and intellectual ability, other characteristics, which have been found to be highly related to educational and occupational aspirations include: self-concept in relation to school ability and attitudes toward school, as measured by past academic performance, grades and ranks, relationships with teachers, peers and significant others, classroom morale, and school curriculum (Bachman et al., 1978; Dawkins, 1981; Karmel, 1975; Marini, 1978; Pascarella, Walberg, Haertel & Junker, 1981; Pelham & Fretz, 1982; Reitzes, 1980). Studies have indicated the existence of sex differences in the setting of educational goals (Crowley, 1982; Dawkins, 1981; Dunne, Elliott & Carlsen, 1981; Karmel, 1975; Marini, 1978; Williams, 1972). Males were found to have higher aspiration levels than females. Sex differences appeared to be greater with respect to occupational aspirations than educational aspirations (Marini, 1978). Additionally, Sewell (1963) speculated that adolescents' attitudes and values about mobility, security, independence, occupations, and residential preferences, as well as some deeper personality traits may have some effect on their orientation toward the future.

Considering the many factors which influence the development of educational and occupational aspirations and expectations of adolescents, it was not surprising to note lower aspiration levels among rural youth. Although Dunne, et al. (1981) reported that there have been changes in the pattern of aspirations among rural youth during the last decade, these youth remain disadvantaged due to the combination of structural and social-psychological factors influencing the development of aspirations. For example, their school and community environments, lower socioeconomic statuses, and lower parental educational levels, factors beyond an individual's control, are unlikely to arouse high aspirations among low-income youth (Sewell, 1963). Future plans of these youth often involve limited vocational training and early labor force entry (Kenkel, 1981; Thomas & Falk, 1978). Therefore, educational attainment may be minimized in the initial stages of the attainment process, and may become even less feasible over time. Once low-income rural youth enter the labor force, returning to the classroom may become too expensive an alternative at a later time.

Concerted efforts aimed at alleviating disadvantageous environments are needed. On the micro level, for example, improvement in classroom and school morale is needed. An extensive body of research evidence has suggested that the quality of the classroom social environment is positively and significantly associated with educational aspirations (Pascarella et al., 1981). Efforts to increase the education of parents may be another among the steps needed to remedy the consistently low levels of educational and occupational aspirations among low-income, rural youth.

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Significant Others*

The influence of particular significant others on the career and family plans of young people is important in the lives of low-income youth, particularly those from rural Appalachia. Several authorities have argued that youth from this region live in a world that revolves around social relationships with immediate and extended family members. Bonds between members of low-income Appalachian families and the influence of family members on the life plans of youth are considered to be very strong (Brown & Schwarzweller, 1970; Ford, 1962; Weller, 1965).

The social circumstances and available significant others of low-income black youth from the South, on the other hand, both share characteristics with and differ from the patterns of referents that are typical of white youth from southern Appalachia. Some observers have argued, for example, that black youth lack appropriate role models (or significant others) within the nuclear family and may rely on extended family (i.e., other relatives besides parents and siblings) and nonfamily referents (e.g., peers, teachers) for information and advice about life plans (Gurin

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& Epps, 1966; Osipow, 1975). Additional literature on black families has suggested that black mothers function as important socializers, whereas black fathers have been portrayed traditionally as uninvolved with child-rearing (Frazier, 1950; Gurin & Epps, 1966; Moynihan, 1965). In contrast, other literature has been severely critical of these "deficit" interpretations portraying black families as being disorganized and matriarchal in structure (Hill, 1972; Peters, 1981; McAdoo, 1981). Research also has indicated that similar to white youth from Appalachia, many black youth often are socialized within the context of extended kinship relations (Manns, 1981; Martin & Martin, 1978; Stack, 1974).

An important idea has been that both low-income black and white youth may experience many advantages and disadvantages from the powerful influences of family members who function as significant others. For example, strong family ties are important mechanisms that help family members during times of crisis (Burr, 1973; Hansen & Hill, 1964). In contrast, pervasive family ties can be a disadvantage when they discourage young people from having contact with significant others outside the family. That is, cohesive, familistic orientations may provide low-income youth with fewer opportunities to interact with individuals outside the family who may provide alternative values, aspirations, and attitudes. Moreover, adults from low-income families often have been unsuccessful in school settings and are unable to provide sophisticated information about career and family planning to their children. Middle-class parents, on the other hand, often have been more successful in formal educational environments and convey information to children more effectively about a wider variety of career options. Parents having middle-class backgrounds also are more likely to encourage their offspring to make marriages and fertility plans in a manner that does not hinder their career plans (Otto, 1979).

The socioeconomic status of young people creates conditions that limit the number and type of significant others from outside the family who are available and the nature of their influence (Haller & Portes, 1973; Sewell et al., 1970; Williams, 1972). Frequently, most relationships of low-income youth are limited to other low-income persons who convey attitudes, values, and expectations that encourage lower career aspirations, early marriage, and higher fertility.

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Life Satisfaction*

Much has been written, within a wide range of disciplines, about those aspects of life which contribute to an individual's sense of security, confidence and overall satisfaction. What those components are, and how to maximize their access have proven to be elusive issues for both social scientists as well as social policy makers (Dalkey, 1972).

Broadly defined, quality of life has been viewed historically as the degree to which a society, or an individual, is able to satisfy perceived psycho-physiological needs. The level of quality of life is determined by barriers presented to an individual in satisfying those needs (Dalkey, Rourke, Lewis, & Snyder, 1972). Specifically, these issues remain debatable--what aspects of an individual's life, environment and social milieu have an impact on an individual's assessment of their own life quality and their own satisfaction with their life conditions? For example, it has been established that objective indicators such as income level and aspects of one's job are important determinants to be used when assessing quality of life. However, their impact when placed in juxtaposition to leisure activities and family considerations become less obvious, and are under increasing scrutiny.

Attempts to clarify life-satisfaction issues have been hindered by methodological problems. For example, in determining what aspects to include under consideration as being important to the assessment of quality of life, researchers have found it difficult to identify constructs which are themselves distinct in assessing specific aspects, or even to clarify areas of overlapping assessment. When surveys or studies have identified a list of components, they have been difficult to relate and apply to human behavior (Dalkey et al., 1972).

Traditionally, assessment of the quality of life has involved the use of objective components such as economic indicators. In recent years, however, there has been an emergent interest in the assessment of subjective quality of life (Campbell & Converse, 1972). There has been a sense that it is no longer enough simply to compare quality of life issues based exclusively on objective determinants such as income or health. It has become important to find out how individuals themselves perceive their environment and how they feel about it, in order to determine what is important to them and what they feel constitutes a better or worse quality of life. However, subjective indicators are themselves elusive both in terms of definition and measurement. To date, subjective indicators have lacked the evidence of enduring effectiveness when compared to indicators found in more easily quantifiable objective measures. When such indicators are measured longitudinally, as have their objective counterparts, their effectiveness may well be validated (Rogers, 1982).

Methodological difficulties notwithstanding, exploration of issues related to the quality of life have become increasingly important. Throughout our society there is a tendency to question goals and values. Nationally, there has been a growing acceptance for a responsive public policy that impacts and improves the quality of life for its citizens.

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However, without clarification of what national and individual goals and values are, policies will remain vague and the programs they generate unproductive (Dalkey, 1972).

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CHAPTER II
SAMPLE AND PROCEDURES
by
Sarah M. Shoffner

Until the mid to late 1960's, much career research centered on white middle-class high school students. This meant that the more economically deprived youth were not represented because they had dropped out of school. Moreover, most of the studies focused largely or entirely on boys. This was true for many reasons. Perhaps there was an implicit assumption that careers and status attainment are more important for males or that the status attainment of females is complicated by that of their husbands. This study is different and represents a movement to extend career research to a wider sample.

A group of sociologists and child development professionals collected data at three occasions over a ten-year period, specifically on low-income youth. We started with younger children, interviewed the children's mothers, experimented with social intervention in the career-decision process, and have since carried out two reinterviews, enabling longitudinal analysis.

In this chapter the sample and procedures for the three phases will be described with emphasis on the longitudinal follow-up methods used in the last phase. The study design, sample selection, description of instruments and survey cases for all three phases, and the procedures for data collection will be presented in the following sections. The last section of the chapter will include the coding operations, the form in which data are stored, and how one might carry out further secondary analyses.

Phase One Baseline, 1969

Sample Selection

The sample and data for studies reported in this technical bulletin were obtained through the Southern Regional Research Projects S-63 and S-126, both cooperative efforts of the Agricultural Experiment Stations in seven southern states. The investigators of the initial S-63 project judged that the fifth grade was about the earliest time that children would have begun to form career expectations. This time period was chosen for study because the researchers initial interest was to aid mothers to lift their children's aspirations. The baseline survey of 1969 was done to show what variables were both associated with level of status projections and also might be influenced by mothers. The experimental phase would then be used to impart this information to mothers who would apply leverage to raise their children's aspirations. In fact the baseline survey showed children's aspirations and expectations to be already quite as high as other U.S. middle class youth so the experimental phase that followed was redesigned to give mothers information on preparing their children for certain jobs.

The sample was of all children in fifth and sixth grades in 28 schools scattered over seven states. The schools themselves were selected by the investigators within their states so as to fill quotas assigned to each state of three types of low income localities--urban black, rural black and rural white. Random selection was ruled out since the investigators were fairly familiar with almost all schools that were eligible. They could thus judge which were typical and they also knew which were unlikely to cooperate due to desegregation problems.

Children were characterized as being from the rural subculture if they attended school and lived in the country or in a town with a population of less than 2,500. The number of completed cases from each of the participating states and the subcultures that each studied are shown in Table 1.

Data Collection

After obtaining the cooperation of school personnel, the researchers administered Student Survey Forms and Otis-Lennon tests of mental ability to all fifth- and sixth-grade students in their classrooms the day of the survey. The children read and marked their own questionnaire form as the researcher read the questions and response categories aloud. Subsequently, questionnaires were eliminated for children fitting the following descriptions: those with major physical disabilities; those with serious chronic diseases, or serious mental handicaps (A few child-subjects were dropped from the study when attained IQ scores were below 60 and the classroom teacher believed the children would not understand the questions.); those from backgrounds or living situations obviously unrepresentative of the subcultures (high status professional parents, both parents college graduates, and white students in urban black schools); foster children and wards of the state in boarding homes; children not living with their mother, stepmother or adopted mother. Family data and addresses were obtained from the children and also from school records. Questionnaires were then administered through personal interviews to the mothers (or, in a few cases, to mother substitutes).

Baseline data from the mothers were collected during home visits by interviewers from the survey area or by the researchers. Interviewers were supplied with a detailed manual of procedures (see Appendix C) and trained by university research personnel under whose direction they worked. Before visiting the home, the interviewer called for an appointment if the respondent had a telephone; otherwise, the interviewer went to the home for the purpose of introducing the project, requesting cooperation from the mother, and arranging for an appointment at which time the Mothers Survey Form could be administered. During this first visit most questionnaires were completed. If not, the interviewers were able to make an appointment to return. Interviews were secured from the mothers of all children whose data had been retained after the screening process described above. Quoting from the baseline report (p. 6):

> About 12% of the students were absent on the survey day, and an additional 9% had IQ scores sufficiently low to preclude the use of the pencil and paper type of measuring instrument. For 7% of the cases no mother was present and for 7% the enumerators could not locate the mother or she refused to be interviewed. Of the mothers contacted, it was found that 7% had been interviewed for another

sibling and for 8% complete data were not obtained. Consequently, the number of completed cases was only 58% of all the students initially available in the schools. When the survey findings tend to demonstrate, as they do, that students from these sub-cultures are much like "upper middle class America", one should recall that about one-third of the possibly more recalcitrant part of the population may not be represented.

Phase Two, Youth Follow-Up, 1975

The second phase, conducted in 1975, was a follow-up of the youth, ages 17 to 19, when they could be expected to be juniors or seniors in high school. The questionnaire was patterned on the earlier one and most forms were administered in the school setting. Those subjects absent from school on the interview day were contacted at their homes or other places. Some had dropped out of school or moved away and they posed special difficulties.

Enumerators for this phase were in some cases retired school teachers from the community and in others were graduate students. The initial steps were to recontact school authorities, get permission to secure data from school records, and make arrangements for administering questionnaires in the schools to the youth who had been in the original sample. Checking records and talking with school principals and teachers gave indications as to which of the 1969 sample students were still in the district, where they could be reached and whether they were still in school. If no help was forthcoming from these sources, interviewers tried to obtain information from parents or kin still in the area, postmaster, former neighbors, local storekeepers or other informants. A key source was fellow sample members still in school. This proved to be the best source for many states. Youth not in school were then contacted personally and interviewed. Depending on the situation, judgment was used as to whether oral interview, self-administration with researcher reading, or self-administration in the presence of the researcher/interviewer was appropriate. If necessary an appointment was made to return a second time to administer the questionnaire. As a last resort, a questionnaire was left for later pick up or mailing.

In some states a sub-sample of mothers was reinterviewed. Addresses were updated from the school records. When such were not available, the mothers were found in the same manner described above for the youth.

Description of the Sample

In this second phase, recontact was attempted with 1,293 and 946 sample members were reinterviewed. The original questionnaires were not available in Alabama, thus it was not possible to attempt a recontact with those 210 cases, while 91 white students from urban black schools were reintroduced to the study. The loss of cases was due primarily to the inability to locate the original respondents. One school in Mississippi was not recontacted in 1975. Therefore, the response rate for the second phase was 73.2%. Of this sample, 42.4% were black, 57.6% were white; 50.7% were male, and 49.3% were female.

Table 1. Subculture, Gender, and State Distribution of Baseline Subjects

	Urban Black		Rural Black		Rural White		Urban White		State Totals
	M	F	M	F	M	F	M	F	
1969 Baseline									
Alabama	51	54	48	57	-	-	-	-	210
Kentucky	36	42	-	-	97	89	-	-	264
Mississippi	-	-	115	120	-	-	-	-	235
North Carolina	-	-	-	-	102	115	-	-	217
South Carolina	-	-	79	61	-	-	-	-	140
Tennessee	-	-	-	-	88	88	-	-	176
Virginia	93	77	-	-	-	-	-	-	170
Total	353		480		579				1412
Second Longitudinal[a]									
KY	32	35	-	-	79	72	19	26	263
MS	-	-	57	56	-	-	-	-	113
NC (2)[b]	-	-	-	-	79	100	-	-	179
SC (3)	-	-	51	36	-	-	-	-	87
TN	-	-	-	-	84	83	-	-	167
VA (3)	72	57	-	-	-	-	-	-	129
	104	92	108	92	242	255	19	26	
Total	196		200		497		45		938
Third Longitudinal									
KY	9	14	-	-	37	42	7	14	123
MS (8)	-	-	35	48	-	-	-	-	83
NC (3)	-	-	-	-	60	86	-	-	146
SC (1)	-	-	15	6	-	-	-	-	21
TN (4)	-	-	-	-	43	54	-	-	97
VA (4)	31	23	-	-	-	-	-	-	54
	40	37	50	54	140	182	7	14	
Total	77		104		322		21		524

[a] Alabama did not participate in second longitudinal phase
[b] Number missing

Phase Three, Young Adult, 1979

At the beginning of the third phase, it had been ten years since the initial contact with the sample members. It was feasible, however, to conduct a second follow-up study because data were intact and several pieces of identifying information or "anchor points" (Otto, 1978) were available for the original respondents from the previous phases (1969 and 1975). The following information was very important to the relocation process: Full name of the respondent, respondent's birthdate, names of two people who would always know of the respondent's whereabouts, full names of parents, previous mailing address for either respondent or parents, and name of parent's employer (from 1969).

Respondent Relocation Procedures

The goal of the recontact method was to maximize the response rate. To achieve a successful survey, our approach needed to focus on relocation of the respondent with techniques able to convince sample members to respond and to do these in the most efficient way. Appeals were worded to relate to the original school areas in the sample and to the identity of individual respondents.

Face-to-face procedures had been successfully used in the first two data collection phases with respondents of school age, but for the ten-year follow-up such an intensive, individual, community-interviewer method was not a uniform option across the region. Many of the states had a limited number of research personnel and modest project budgets. Therefore, general tracking strategies were designed to locate the respondent and then successfully secure the completed questionnaire schedule without the advantage of interviewers, for the most part.

The mail survey, augmented with telephone contacts was the chosen tracking strategy. Address records had been updated in 1975 when sample members were requested to include names and addresses of their parents and of two other people who would always know of their whereabouts. Our mailing system was similar to Dillman's Total Design Method (Dillman, 1978) and to strategies described by Otto (1978). This system was used throughout the six states involved in the study and included three phases: (1) address maintenance, (2) mailing questionnaires, and (3) follow-up procedures--telephone survey or face-to-face contact with hard-to-locate respondents. Refer to Figure 1, Procedure for Locating Respondents, throughout the discussion which follows. References in the text to numbered steps correspond to the numbered procedural list on the left side of the figure. Blocks refer to the lettered areas down the center of the figure.

Address maintenance. We started with a good mailing list which had 4-year-old updates of names, addresses, parents' full names and telephone numbers, sample members' birthdates, schools attended, their response records in the 1975 phase, and in some cases the names of one to two people other than the parents "who would always know where the respondent would be." [Step 1] These details served as the "anchor points" (Otto, 1978) for relocating the sample members.

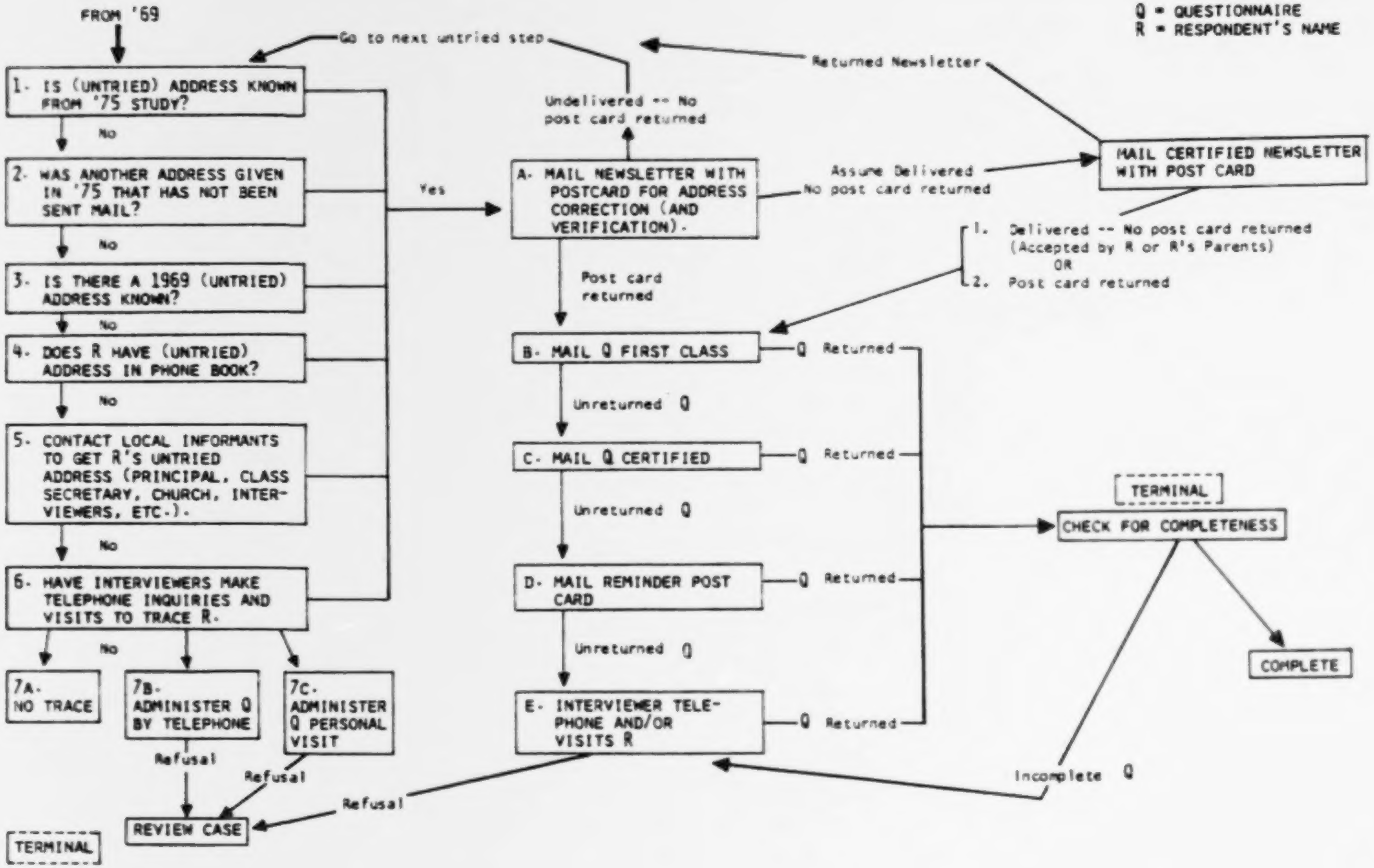
We wanted out respondents to read our letters and answer our questions, so our letter/questionnaire had to convince the sample members to respond. As a part of the first appeal [Block A, center of the location procedure, a newsletter and a postcard for name and address and/or verification correction were included in the mailing. A triangular shaped newsletter was personalized with the name of the subject handwritten and the researchers' location on the front flap. Yellow colored borders were used to attract attention. Inside the newsletter, the history of our

FIGURE 1

PROCEDURE FOR LOCATING RESPONDENTS

PROCTOR AND SHOFFNER
S-126 LONGITUDINAL STUDY

Q = QUESTIONNAIRE
R = RESPONDENT'S NAME


FROM '69
1. IS (UNTRIED) ADDRESS KNOWN FROM '75 STUDY?
No
2. WAS ANOTHER ADDRESS GIVEN IN '75 THAT HAS NOT BEEN SENT MAIL?
No
3. IS THERE A 1969 (UNTRIED) ADDRESS KNOWN?
No
4. DOES R HAVE (UNTRIED) ADDRESS IN PHONE BOOK?
No
5. CONTACT LOCAL INFORMANTS TO GET R'S UNTRIED ADDRESS (PRINCIPAL, CLASS SECRETARY, CHURCH, INTERVIEWERS, ETC.).
No
6. HAVE INTERVIEWERS MAKE TELEPHONE INQUIRIES AND VISITS TO TRACE R.
No
7A. NO TRACE
7B. ADMINISTER Q BY TELEPHONE
7C. ADMINISTER Q PERSONAL VISIT
Refusal
Refusal
Refusal
REVIEW CASE
TERMINAL
Go to next untried step
Yes
A. MAIL NEWSLETTER WITH POSTCARD FOR ADDRESS CORRECTION (AND VERIFICATION).
Undelivered -- No post card returned
Returned Newsletter
Assume Delivered
No post card returned
MAIL CERTIFIED NEWSLETTER WITH POST CARD
1. Delivered -- No post card returned (Accepted by R or R's Parents)
OR
2. Post card returned
Post card returned
B. MAIL Q FIRST CLASS
Q Returned
Unreturned Q
C. MAIL Q CERTIFIED
Q Returned
Unreturned Q
D. MAIL REMINDER POST CARD
Q Returned
Unreturned Q
E. INTERVIEWER TELEPHONE AND/OR VISITS R
Q Returned
TERMINAL
CHECK FOR COMPLETENESS
COMPLETE
Incomplete Q

contact with the respondent was briefly described, and a request was made that the present address and telephone number be verified or corrected. A few statements about findings from the 1969 and 1975 responses were listed on the back of the newsletter.

The success rate of returned cards varied across the seven states. For example, in the North Carolina sample, 51 of the 217 resondents (23.5%) returned the business reply postcard within five weeks after it was mailed. In Mississippi 134 cards were sent and 67% were returned undeliverable.

Next in the relocation strategy [Steps 2 - 5], procedures were followed to determine an address for all respondents who did not return the postcard. In several states, interviewers in the survey community who had worked with the original project served as local informants and attempted to furnish current addresses through school personnel records. Letters and a list of student names and last known addresses were sent to classmates already interviewed asking about their high school classmates whom we had not been able to find. In other cases the post office, telephone office, voting records, local churches, and even the media were used in the search for addresses of the original respondents. Radio announcements were tried in one state as a means of locating the hard-to-find respondents. However, fewer than ten respondents out of 235 were located with this method. In another state current addresses were secured for all but nine of the 217 sample members.

The urban-rural composition of a population is known to affect the tracking effectiveness (Crider & Willits, 1973; Otto, 1978) and our sample was no exception. Respondents from rural areas were generally easier to find because members of their social networks usually knew their whereabouts. However, this information was difficult to get, in both urban and rural areas, and particularly with the blacks, because people were not always willing to tell of someone's whereabouts even when they lived nearby.

Local postal carriers accounted for many successes in reaching respondents, particularly in the rural sample areas. They were helpful in forwarding mail and even in locating addresses for many who had moved to adjoining areas. In one state, letters mailed to ten- and five-year old addresses resulted in only 18% being marked "undeliverable as addressed", "insufficient address", and "addressee unknown". Otto (1978) reported 21% returned undeliverable in towns with less than 1,000.

Usually it is thought that individuals in the military are more difficult to locate given their mobility and the lack of social contacts in stable communities; however, many addresses of sample respondents in the military were learned from relatives.

Mailing questionnaires. The first questionnaire was mailed to the respondent [Step B in the process] in an envelope addressed with the full name of the respondent and the names of the parents. A letter on University letterhead, hand signed by the researcher, accompanied the questionnaire booklet which had been designed to be folded and inserted in the business reply return envelope. The respondent's name was handwritten in the greeting. Commemorative stamps were used on the first and subsequent outgoing mailings as an added interest. All response cards, questionnaires, envelopes, and newsletters were uniformly printed for the region and some segments were personalized for the individual states. Follow-up cards and letters were prepared by individual researchers who use the standard format agreed upon by the regional committee.

Certified mail was used infrequently. In most cases that step was omitted from the procedure because of the expense and because personal contact was getting respondents to complete and mail the questionnaires.

Follow-up procedures. Besides an attractive and enticing message the success of a mail procedure generally depends on the frequency with which the message is sent. Experience has shown that multiple mailings raise response rates. A mail reminder postcard [Step D] and a second reminder letter was used in our system. In some instances the second reminder letter was handwritten in response to specific situations identified by the local interviewer through the address verification process. A third mailing, if needed, included another questionnaire and a letter written in a tone of insistence. We said we had not received the completed questionnaire; we stressed the importance of the respondent to the success of the study.

Personal contact. The last step in the procedure [Step E] was perhaps the most effective in achieving a high response rate. Local interviewers telephoned or visited the respondents to ask if the questionnaire had been received and to encourage its completion and return. People responded most favorably to this personal contact from the research staff which included either a local interviewer, a graduate student working in the area, or a former classmate of the respondent.

Time spent in relocation. We spent about a year and a half working through the total tracking sequence from mailing the address verification post card to return of the last questionnaire. The last year was devoted to mailing questionnaires, following up leads when mail was returned undeliverable, and personal contacts for respondent location and for the encouragement/prodding procedures. During this time as many as three copies of the questionnaire were sent to some of the respondents. Time spans varied among the states according to availability of personnel; but the respondents were all contacted and questionnaires were secured within a 16-month period between February, 1979 and mid-April, 1980.

Response rates. Although some elaborate and extensive national studies have reported 80-90% return rates, typical response rates do not exceed 50% (Kerlinger, 1973). Our overall regional response rate for the number of questionnaires obtained was 42%. This figure is based on the potential sample of 1,293 minus three deceased. A total of 544 questionnaires was secured from the potential 1,291 respondents. Even though 946 respondents had been recontacted in 1975, it was believed that a portion of the original group could be reached in 1979. Therefore, an attempt was made to locate as many of the original as possible rather than using only the 1975 pool as a beginning point.

Description of the Sample

Rural and urban whites represented 343 (147 males; 196 females) of the total, and urban and rural blacks numbered 181 (90 males; 91 females). See Table 1 for subcultural and state distribution.

Overall, the Appalachian sample response rates were higher than others subcultures represented in the regional study. The percentage of returns by race and residence distribution for the potential respondents from the original sample is 60.6% for the rural Appalachian whites; 30.4% for the rural blacks; and 31.9% for the urban blacks. In the Appalachian sample, these were the percentages for returns by states: Kentucky = 35.8%; North Carolina = 69.6%; and Tennessee = 58.0%.

Over-exposure to surveys may have increased reluctance in some respondents to participate. Monetary or similar incentives might have increased the response rate; but economically these were not feasible. However, interviewers [Part E] who made personal contacts through telephone calls or visits and either waited for or arranged to pick up the completed questionnaire were instrumental in providing the structure that stimulated a successful increase in the number of returns. Respondents indicated that they were responding because the interviewer reminded them of their importance to the study.

Non-Respondents

The longitudinal tracking system included a process for recording reasons for non-response. Data from non-respondents from four states are available according to the reason for not securing a completed questionnaire (Table 2). When comparing rural whites with urban blacks there is a clear distinction in tracking success.

The literature documents difficulties in tracking minorities (Otto, 1978). Overall, we obtained the lowest response rates in the urban black areas; however, rural blacks from one state were considerably under represented in the total--only 21 completed questionnaires were obtained from a potential of 140 (15% return).

Other family characteristics also affected the tracking records. Some families withheld information about family members who lived away, and visited only occasionally. (Strained family relationships were evident in some cases.) Others would claim they did not know of their youths' whereabouts, but promised to inform them about the questionnaire when they came to visit or called. Although many reports in the literature (Otto, 1978) indicate that families will withhold information about members who are in prison or in trouble with the law, one young man was in prison and indicated to a family member that he had lots of time and really wanted to complete the questionnaire. On the other hand, one mother was reluctant to share the questionnaire with an imprisoned son.

Progress and Problems

Many of the problems and successes of this longitudinal follow-up are evident in the previous discussions, but some highlights still warrant mentioning. Our response rate might appear low when compared to some reported as 80-90% for large-scale national studies. However, an overall rate of nearly 50% seems indicative of progress when considering the usual cautions reported in the literature regarding how difficult it is to locate and gain cooperation from the poor and minorities.

Table 2. Distribution of Longitudinal Sample for Three States by Reason for Non-Response

Rural White			Urban Black	
KY[a]	NC	TN	VA	Reason for Non-Response
				Non-Respondent
3	3	2	1	1. Deceased[b]
44	8	1	-	2. Respondent refused to answer questionnaire
1	2	-	-	3. Parent(s) refused to give information about respondent or didn't give quesstionnaire to respondent
27	3	-	70	4. Knew address but couldn't locate respondent
120	9	9	-	5. No current address known
30	43	62	42	6. Located, but respondent didn't return questionnaire
-	-	1	-	7. Too little information on questionnaire, not usable
6	-	-	1	8. Other (VA, respondent too ill to answer questions; KY)
				Respondent
123	149	101	56	9. Secured questionnaire
354	217	176	170	

[a] 91 Kentucky respondents were urban white.
[b] Deleted when figuring response rate (35% KY; 69.6% NC; 58.0% TN; 33.1% VA).

Particular difficulties in locating young adults and women have also been cited in the literature which also notes that with more elaborate procedures, these persons generally can be retrieved (Eckland, 1968). The persistence and often times person-to-person intensity with which we approached our search may have contributed to the retrieval success. The efforts of our local facilitators in using the various contact devices were definitely the key features underlying our accomplishment.

Another key resource was the research assistants, who had already established or gained rapport with the community personnel. They sometimes worked with the interviewers in finding "leads", logging details of these leads, and then contacting those hard-to-locate respondents. They found it useful to work jointly in reviewing the hard-to-find cases, exchanging ideas on how to plan strategies and in making telephone contacts. The telephoning portions of recontact procedures are labor-intensive activities and working in pairs made it easier to "trade off" calling efforts and keep up an efficient pace.

The researchers and local assistants also did important services for several respondents. Personal notes attached to returned questionnaires often were appeals to project personnel for information about jobs, resources for educational opportunities, etc.

In retrospect a major problem preventing the achievement of greater returns may have been insufficient allocations of resources for the total tracking operation. Longitudinal research is an expensive mode of answering research questions. We estimate that the average cost was about $60 per completed interview. Personnel and budgetary allocations varied among the states, and in an effort to maintain fairly uniform procedures some decisions about tracking strategies were made with consideration for these constraints. Also, budget limitations precluded the use of computer hardware and software to produce the materials for mailing and for record keeping on the tracking process.

A final problem issue about which it is possible only to speculate is whether the longitudinal tracking efforts and even the data themselves are influenced by respondents being over-exposed to surveys--by what Parnes (1972) calls the "Heisenberg principle." That is, the process of repeated interviews with the same respondents over the years may exert an influence on their response behavior, both the quality of their answers and whether or not they even chose to respond.

Description of the Instruments

The following discussion is a brief descriptive overview of the components of the original questionnaire and the variables added for the 1975 high school follow-up and the 1979 phase. Appendix A contains a discussion of the origins of the items in the research literature, their contribution to this longitudinal study, and adaptations to their wording or administration that were introduced.

Phase One, 1969

Two questionnaires were used in 1969. One, the "Survey of Student Plans for Work and School" included questions relating to educational and occupational aspirations and expectations, academic and achievement motivation, independence training, self-concept, and the child's perception of the mother's behavior. The other, "Mother's Survey of Occupational and Educational Goals for Children", included questions on educational and occupational aspirations and expectations in terms of what the mother desired for her child, achievement values, anomia, and characteristics that the mother valued most in her child.

Phase Two, 1975

When the 1969 sample was reinterviewed in 1975, the following baseline variables were remeasured: household composition, how often respondent thought about future job, occupational aspirations, occupational expectations, ways heard about job of choice, education thought required for job choice, persons talked with about future jobs, educational aspirations, educational expectations, how likely to get preferred job, persons talked with about how far to go in school, perception of how far parents want youth to go in school, whether talked about dropping out, academic interest scale, whose advice about future plans is most important, parents' occupation, and sources of familiy income.

In addition, items measuring the following variables, not asked in 1969, were included in the high school age follow-up: locus of control; present marriage and children status; plans for marriage and children; influences on marriage and family plans; ideal age of marriage; residential preferences for the future (size of place, area of the country or world); perceived impediments to getting preferred job; how likely to be able to get preferred job; how long have been thinking about preferred job; other job choices considered recently (besides present first choice); characteristics valued in a job; work experience; current high school grades and grade average (if still in school); attitude toward married women working; reasons for and present attitude about dropping out of school (those no longer in school), how occupied and present plans if a school dropout.

The mother's schedule used in 1975 was almost identical to that of 1969. However, it was only administered in four of the states to a subsample of the original mothers.

Phase Three, 1979

The 1979 longitudinal instrument included items on locus of control and self-concept; significant others important to the respondent regarding jobs or education and personal or family matters; life trajectories formed from questions about the subject's activities from 1975 to 1979; job experience classified by year; employment records including weeks unemployed and main reason for unemployment; sources of income with main source identified and approximate amounts of income received; existing living situation and satisfaction with it including place living and its closeness to where respondent grew up; marital status and year married, age married, and number of children; satisfaction with community size, living arrangements, quality of housing, and life satisfaction; overall marital happiness; job search patterns including various methods for seeking a job; job satisfaction including satisfaction with different things about the job, the job as a whole, with money, and satisfaction with their work experience considering all jobs as a whole; educational attainment encouraged by parents, satisfaction with educational attainment and with parts of high school education, and self-satisfaction in taking advantage of what school offered; barriers to job attainment such as the things perceived as keeping them from getting the jobs they wanted; barriers to educational attainment such as those things that kept them from getting the desired schooling; and occupational aspirations and expectations.

Reliabilities of Summary Scores

When using questionnaire items that were developed by other investigators, one usually verifies that they seem to be working reasonably well and we did this for the baseline study. Quoting again from the baseline report:

> The following variables were scored by giving numerical scores to item responses and then adding these over the set of items belonging to that variable:
>
> AC, Academic liking (10 items on Child's questionnaire, "Survey of Student Plans for Work and School"),
>
> SEL, Self-esteem (21 items on Child's questionnaire),
>
> IND, Mother explains (5 items on Child's questionnaire),
>
> PU, Mother is punishing to me (12 items on Child's questionnaire),
>
> DM, Mother is demanding to me (14 items on Child's questionnaire), and
>
> LV, Mother is loving to me (15 items on Child's questionnaire).
>
> Such a simplistic scoring procedure was certified as correct if, when the variable's items were factor analyzed, all loaded above .50 on the first principal axis factor in six study groups. The factor analysis computer output often indicated more than one factor with a latent root above 1.00, but only one case showed up where a second factor was recognizable in all or nearly all subgroups.
>
> This occurred with the original set of 18 Loving items.... . ... One sub-sub-scale (called "Lb") contained the items:
> I can talk her into most anything,
>
> She lets me off easy when I am bad, and
>
> She finds it hard to punish me.
>
> These three items formed a second factor in most groups, particularly for the rural whites. Thus the loving variable as measured in this study does not include "indulgence", which seemed, at least for this study population, to be a distinct characteristic from loving. Future studies as well as the interpretation of the present one would be well advised to heed this distinction between permissiveness and loving.
>
> The factor analysis output also allowed a quick determination of reliability for each of these variables. The formula used was:

$$\text{(2)} \qquad \text{Reliability, } r_{xx} = \frac{K(D-1)}{(K-1)D},$$

where K is the number of items and D is the largest latent root of the inter-item correlation matrix. The formula (2) stems from the Spearman-Brown prophecy formula, namely:

(3) $$r_{xx} = K\bar{r}_{ii}/[1 + (K-1)\bar{r}_{ii}] \ ,$$

where $\bar{r}_{ii}$ is the common intercorrelation of any two items, along with the formula for the largest root of a matrix with $\bar{r}_{ii}$ in off-diagonal places and ones on the diagonal, namely:

(4) $$D = 1 + (K-1)\bar{r}_{ii} \ .$$

Substituting for $\bar{r}_{ii}$ in (3) by using (4) gives (2). Although in no actual case were all inter-item correlations equal to a single value, the formula (2) is still a reasonable approximation as was found by making a more complicated calculation in a few cases. The reliability turned out as:

> .74 for AC, .88 for SEL, .49 for IND, .81 for PU, .75 for DM, and .81 for LV.

There is nothing intrinsically wrong about working with a variable having low reliability, such as IND at .49. It is perhaps wasteful of respondents' time and of computing time relative to other more precisely determined variables, however it is better than having nothing. The estimates of the size of effects are always biased downward when using such variables so that some correction for attenuation is in order. Also, if no significant differences are found, one cannot so easily dismiss the variable from consideration but must grant that an improved score might have shown some. (73-74)

Coding Operations and Data Storage

After each data collection phase the researchers in each state coded the responses according to a uniform coding manual developed for all contributing projects in the region. All coding was verified and cards were punched and sent to the project statistician who was responsible for combining data and preparing the tapes. To further verify coding accuracy an audit was performed on a randomly drawn proportionate subsample of the cases. This audit was done to see that no states had failed to conform to the minimal standards. In fact we found a low rate of coding discrepancies.

For the analysis of the baseline survey the research questions were fairly straightforward. We needed to know why some youth had high and others had low status projection and what did the mothers' attitudes and rearing practices have to do with it. The analyses were basically multiple regression runs with status projections as dependent and other variables, grouped into blocks decreasing in causal priority, as independent variables. For the later phases of the research, the objectives became more diffuse. Other aspects of career attainment, such as place of residence, marriage and having children, were brought into the questionnaire. Investigators in different states had different interests. Also there were local expectations for investigators to look primarily at the data from each one's own state. Consequently, the data handling operations gradually became decentralized. That is, the baseline analysis was computed at one location while many of the calculations underlying the present report were done at the various states' computing centers.

This became possible through providing each state with a tape containing almost all of the data collected. A copy of all coding manuals was furnished with the tape and we also sent along descriptions of the five files of the tape. These provided prospective analysts with the necessary information to handle the sheer volume of variables and the abbreviated terminology used in describing the data sets.

For the baseline data we made zero-order imputations to remove missing responses, but for the remaining data many of the miscodes and absent item responses were included. This was an additional barrier to analysis by state investigators. Thus, for clerical reasons, the decentralization of the data analysis was not completely satisfactory.

The tape containing the survey's data has the following:

File 1 is a SAS data set with four parts which are CHT1, CHT2 and CHT3 containing summary variables from the three cohort surveys along with the LGT which carries three years worth of data on youth plus mother information for the 550 cases in the longitudinal sample.
File 2 has card image data of the baseline survey.
File 3 has card image data from mothers at the second longitudinal phase.
File 4 has card image data for the second cohort.
File 5 has card image data for the third cohort.

In addition to a copy in each state there was a copy left at the ESRC Data Archive, University of Essex in Colchester (COH 35Q) England.

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CHAPTER III
METHODOLOGY
by
Charles H. Proctor

There are a number of data analytic problems we will attempt to deal with in this chapter. They arise from the study's wide spatial scope--several states, many schools and three subcultures--as well as its wide temporal scope--three successive occasions with the same sujbects and also three cohorts from the initial schools. We first examine how representative is the sample. Next we discuss status projection measurement and note some time trends in the cohort samples. Then we consider some consequences of the clustered-by-schools nature of the sample. Next, we review statistical methods for three kinds of problems: a) comparing item means, b) scanning a correlation matrix and c) making cohort comparisons.

Sample Representativeness

The present study is a longitudinal one, sometimes called a panel study. The sample was drawn from a low-income subpopulation of fifth and sixth graders from the Southeastern United States. The youth are from three subpopulations (or subcultures) of urban black, rural black and rural white, in 28 schools scattered over seven states. As mentioned earlier, the four Alabama schools were not part of the longitudinal survey, leaving the study with 24 schools. In 1969, questionnaires were administered in the school to children and interviews were obtained at home from their mothers; about half of them were in fifth grade and half in sixth grade. The principal goals of that baseline study concerned the influences of mothers' attitudes on their children's ambitions. Data were obtained from 1,412 mother-child pairs and the results were reported in the baseline report (Southern Regional Technical Committee for Family Life Research Project S-630, 1974). That report had the following to say about sample representativeness.

> The narrowest population that our sample can be said to represent is the accessible 58% of student-mother pairs in those schools that meet the specific criteria of imbeddedness and cooperativeness ...while the largest might be calculated from the statistics on numbers of families at low income levels in the South for those area belonging to the three subpopulations. The selected schools seemed, to the investigators doing the selection, to be approximately as one in three possible schools in each subculture. From data on the number of families in low income levels in the South that population could number as many as 200,000... .
>
> The sample was drawn of schools and of children, but not of households or of families. This distinction becomes apparent when one attempts to compare the study families to census tabulations by families. For example, the average number of persons per family was 6.8 in the 1,412 cases of the study sample, while it is reported as 3.93 for families in 1968 at the poverty level (U.S. Bureau of the

Census, 1970, p. 50). This is not a serious discrepancy, however, when one realizes that families having many children are more likely to be included in this sample. The U.S. Census Bureau report (1970, p. 51) also gave the number of 18 year olds, and from these data one can calculate that about 22% of these families would have a child in grades 5 or 6, while the average size would be 5.6 for such families. This probability calculation was done by supposing that the under-18 children are equally likely to be in any 1-year sector of the 18 but no two in the same year.

Tabulations by the subpopulations of the present study are not available, but...(the total may be) 2,328 thousand families at the poverty level for the South region. Perhaps half of these (most of the 884 thousand Negro ones) would fit into one of the three subpopulations of the study definition. Of these, 22% would have a child in the fifth or sixth grade. This is where the figure of 200,000, cited above, arose.

Since no list of all possible schools was constructed and no table of random numbers was used to make the selection of schools for this study, the treatment of the data as a random sample is not as realistic as it could have been. However, it is of importance to recognize that the assignment of each subpopulation to three states makes for a stratified sample, while taking all chidren in a number of given schools makes for a clustered sample. A stratified sample tends to have lower variance than a random sample, while clustering leads to the opposite. One could say that, in balance, the variance formulas for a simple random sample should thus be realistic. Therefore, the levels of significance computed using conventional regression theory assumptions will be taken as correct, subject to the appearance of the residuals (p. 60-62).

The subcultural composition of the sample, as can be seen from Table 1 in Chapter II, has changed from the baseline to the third phase in the longitudinal study. This has been mainly due to higher retention rates for whites than for blacks. However, within the subcultures the attrition seems not to have been selective, at least not for levels of status projections. For example, the mean levels of occupational prestige scores, OCC scores, and educational projection scores, ED scores, projected by the original baseline boys were OCC = 66.7 and ED = 5.6 and for girls were OCC = 70.8 and ED = 5.7, while those same means for the third longitudinal sample were 66.7, 5.6, 70.7 and 5.7 respectively. For the family socioeconomic status (FRB) mean scores and the mental abilities (IQ) mean scores the baseline had FBK = 131 and IQ = 86.7 for boys with FBK = 128 and IQ = 88.1 for girls, while the third longitudinal sample means were 134 and 90.6 for boys with 132 and 92.9 for girls. These increases can be explained by subcultural differences in the recontact rates. The follow-up sample had relatively more whites than the baseline sample.

Scoring Status Projections and Mental Abilities and Making Cohort Comparisons

The numerical levels of prestige assigned to the occupations named by respondents (the OCC and ED scores just mentioned) were the North-Hatt scores for occupations on the original 1947 survey's list. (See Jobs and occupations: A popular evaluation by National Opinion Research Center, 1953.) These original scores are average ratings over respondents who used a five-point scale with the lowest rating of 20 and the highest of 100. The occupations named by our respondents that were not on this original list were rated, along with some of the original ones, by two classrooms of social statistics students—one at Raleigh and another at Greensboro. A prediction equation was fitted for the occupations on the original list that allowed us to convert the students' ratings into North-Hatt scores. This equation was then applied to the newly mentioned occupations to find what level of prestige should be coded for these occupations. Thus, for example, dancer became a 72, dietitian a 75, and door-to-door salesman a 59.

Aside from assigning prestige levels to occupations, most items on the schedule were easy to code since they had the simplest possible response format. Some responses used the range from "Frequently" to "Never" and others from "Strongly Agree" to "Strongly Disagree", and they were handled as numerical scores. If an item response was missing it was imputed by using the average score for that item in the subculture-sex stratum of the respondent. Most of the items had already been used in other surveys and had been subjected to factor analyses. Still, we redid many of the factor analyses to verify that the items were working for the young people of our survey in the same way in which they had been designed.

Although we used the Otis-Lennon mental abilities test in 1969 for the baseline survey, we dropped it as too burdensome when we interviewed a new group of fifth and sixth graders, the second cohort, in 1974. We did ask those students "What kind of grades have you been making this year?" The four-category responses were coded numerically 1,2,3, and 4 and served as a score reflecting, to some extent, mental abilities. In 1979 we reintroduced a mental abilities test. This was an abbreviated version of the Quick Word Test (Borgatta & Corsini, 1964) which is a vocabulary test. Fairly extensive analysis of the items of this test (Proctor, 1985) verified that its reliability was quite high and that the reliability was much the same in the different subcultures.

Parallel to the two questions asking about occupations were two that asked about educational plans. The responses ranged from finish eighth grade (0), through finish college (7). By averaging the answers to the amount of education expected and the amount aspired to, we obtained the ED scores and averaging the corresponding two occupational scores produced the OCC scores. As an illustration of their scale of measurement and of some interpretations we have shown cohort means for OCC and ED in Table 3.

The standard deviation of ED scores is about 1.4 and that of OCC scores is about 12. With sample sizes of 200, a least significant difference (LSD) between two ED means in Table 3 would be $\text{LSD} = 2 \times 1.4 \sqrt{2/200} = .28$ and between two OCC means would be $\text{LSD} = 2 \times 12/10 = 2.4$. Thus the decline in OCC scores from the first to the third Cohorts is significant in almost all groups.

Such comparisons are, of course, subject to more questions than just sampling uncertainties. For example, the meaning of an occupation may change so much in 10 years that its prestige ranking would also need to be changed. We judge that this is not the case. It seems that ED scores dipped in 1975 and this may be due to favorable economic conditions in 1975 that encouraged young people to forego education for a good job and a good life. But could it be due to the sample coming from different communities in 1975 than in the other two times? Basically the answer is no, but there were some changes in the places sampled that should be mentioned.

All fifth and sixth grade students were asked to fill out questionnaires in urban schools in Kentucky in 1969, but only the responses from the black students were included in the baseline analyses. For the cohort comparison sample it was decided to include both blacks in predominantly white schools, as in the rural white subculture, and whites in predominantly black schools such as those in the rural black subculture. Thus, all students in the urban schools were included and to make the cohorts more comparable the urban white cases from 1969 were also included (see also Table 3).

Table 3. Status Projections of Three Cohorts of Fifth-Sixth Grade Students in Three Low Income Southern Subcultures by Sex (Sample Sizes in Parentheses)

Cohort	Variable	Males			Females		
		Urban	Rural Black	Rural White	Urban	Rural Black	Rural White
Third (1979)	OCC	60.9	61.2	66.5	65.2	68.3	70.0
	ED	5.1	5.3	5.8	5.6	6.0	6.1
	(N)	(350)	(217)	(216)	(421)	(252)	(250)
Second (1975)	OCC	62.5	65.7	68.7	70.9	69.0	71.7
	ED	4.8	5.5	5.7	5.4	5.6	5.9
	(N)	(325)	(88)	(267)	(394)	(107)	(327)
First Baseline (1969)	OCC	65.6	65.6	68.7	69.9	70.3	72.7
	ED	5.4	5.6	5.9	5.5	5.7	6.2
	(N)	(287)	(242)	(225)	(292)	(238)	(219)

When we noticed the lack of rural black cases in the second cohort sample it was decided to build back that portion of the sample in 1979. Two methods were suggested. One was to go back to the Alabama rural schools and the other was to add some rural schools from eastern North Carolina. Both methods were used with the result that the third cohort sample is again balanced by subcultures.

As a final illustration of a cohort comparison let's consider how the correlations among mental abilities scores, OCC scores and ED scores have changed over time. Recall that our measure of mental abilities changed from Otis-Lennon scores in 1969, to self-reported grades in 1974 to Quick Word Test scores in 1979. Since the level of mental abilities scores changes over study subgroups in response to many factors extraneous to our interest in the correlations, the correlations were all computed after adjusting for school-sex groupings. That is, school-sex means were subtracted from all scores before computing correlations.

When we first examined the correlations between mental abilities scores and ED and OCC scores for the baseline analysis they seemed low. This is to say, if one believes it is beneficial to society in general when youngsters with high mental capacities set ambitious goals while those with lower abilities set lower goals, then the higher the correlation between abilities and aspirations the better. With this in mind, the lack of any increase in the correlations between abilities and aspirations in 1975 or in 1979 is a further disappointment.

Analysis of Item Means for a Clustered Sample Design

The nature of the sample selection procedures becomes important to the degree that the samples deviate from being a simple random sample. Although we concluded in the baseline report that "...the variance formulas for a simple random sample should thus be realistic, ..." there are two reasons this conclusion may not extend to the longitudinal sample. The first one is simply the high rates of nonresponse, particularly among the black subculture, and the likelihood of there being an association between nonresponse and occupational and educational aspirations and attainments. Although we judge the consequent bias not to be too serious, it cannot be discounted entirely.

The second reason refers to the clustering of the sample by schools in relation to the types of statistics employed. In the baseline survey we looked mainly at regression coefficients in order to understand how mothers' beliefs and attitudes, as well as the child's own attitudes, affected the child's status projections. Although we did find slight differences in regression slopes by schools, in the baseline analysis these were relatively unimportant, and in line with most survey research, the design effects for regression coefficients will be close to 1.0. (See Kish & Frankel, 1974.) A design effect of, say, 2.0 means roughly that the sample has an effective size of about half (1/2.0) its actual size. Such results also permit us to ignore clustering of the sample when viewing the correlations in Table 4.

However, present analyses of the longitudinal data make more extensive use of means and percentages and also make comparisons between subcultures. These estimates are subject to larger design effects. That is, the 24 school-localities are representing a larger population of perhaps 2000 to 3000 such school-localities. Because of local business-industry-government-labor conditions, these school localities may foster different levels of occupational and educational aspirations. In order to take proper account of these effects on levels of significance and standard errors, one must include schools as a factor, and a random one, in all analyses—if only to verify its lack of importance. We will now illustrate how this can be done and what difference it can make.

The questionnaire used in 1979 contained a group of items asking how often various methods of looking for work had been used. We will examine answers to these 13 items (1 = State employment office, 2 = Private employment agency, ..., 13 = Applied to a military service) for the 524

Table 4. Correlations Among Status Projections and Mental Abilities Scores for Three Cohorts by Subculture and Sex

Cohorts	Pair of Variables	Urban	Rural Black	Rural White	Urban	Rural Black	Rural White
	QW-OCC	.08	.17	.09	.20	.03	.20
Third	QW-ED	.24	.19	.20	.24	.19	.06
(1979)	OCC-ED	.19	.22	.22	.33	.35	.16
Second	GR-OCC	.08	-.12	.12	.10	-.01	.25
(1975)	GR-ED	.28	.18	.26	.16	.05	.13
	OCC-Ed	.39	.11	.33	.38	.17	.14
First	OL-OCC	.15	.12	.25	.07	.12	.20
(1969)	OL-ED	.37	.08	.24	.24	.26	.11
	OCC-ED	.25	.26	.21	.17	.27	.18

QW = Quick Work proportion correct
GR = Grades this year as ranked in five categories
OL = Otis-Lennon based IQ score

cases. The dependent variable can be scored 0 = never used, 1 = sometimes used and 2 = often used. There was considerable item nonresponse. Out of 13 x 524 = 6,812 possible answers, actually 4,181 were given. We ran an analysis of variance computation (a PROC ANOVA of SAS) with the following sources of variation and degrees of freedom (in parentheses): Items (12), Sex (1), Sub-Culture (2), I*S (12), I*C (24), S*C (2), I*S*C (24), ScHools (in C) (21), I*H (in C) (252), S*H (in C) (19), I*S*H (in C) (228), Case in (S*C*H) (405), and the error term had 3178 degrees of freedom. The corresponding mean squares for the 13 lines were as follows: 52.10, .30, 4.14, 1.69, 1.79, 2.01, .34, 1.25, .48, 1.33, .37, 1.42, .28.

If readers are acquainted with the use of analysis of variance methods to analyze experimental data (they should skip to the last paragraph of this section if they are not) they will know to begin by estimating error variance, say σ^2_e, as .28. Then they notice that 1.42 is too large to be pooled so they leave it aside, but perhaps the .37 can be pooled with the .28 (actually it cannot) and thus they proceed through the sources backwards. The mean square of 1.79 corresponding to the item by subculture interaction effect requires that it be compared to an error term especially calculated to reflect all sources of variation in the 1.79 except the item by subculture interaction. In general there will have to be more than just σ^2_e in this mean square.

We have written a computer program to do the pooling and calculating of proper error terms for such tests of significance (Proctor, 1985). The error term for testing 1.79 turns out to be the mean square .48 and the F = 3.73 is significant (at the "point seven zeroes 7" level). In the language of experimental design, schools is a "whole plot" effect and the factor subcultures is a whole plot factor and requires that it be tested by the whole plot error term. Having to use .48 rather than a pooled error mean square of .30 shows the design effect to be about 1.6.

Thus, by this F-test being significant, the item differences are different from one subculture to the next. A comparison of usage of Newspaper-TV-and-Radio with Parents-and-Relatives by subcultures gives the following means with sample sizes, n's, in parentheses:

Subculture	News, TV, Radio	Parents, Relatives
Urban Black	1.38 (74)	.73 (67)
Rural Black	1.07 (58)	.96 (55)
Rural White	.70 (206)	.94 (213)

One can design a test specifically for comparing the Newspaper-TV-Radio-versus-Parents-Relatives difference from urban blacks (1.38 - .73 = .65) to rural whites (.70 - .94 = -.24). The difference is .89. Its estimated variance is .48(1/74 + 1/67 + 1/206 + 1/213) = .03799 x .48 = .0182 or the standard error is .135 for a t = .89/.135 = 6.59—a highly significant difference (even t = 2 standard deviations is considered large). Notice where .48 is used and the other source of the formula is that the variance of a mean is σ^2/n.

Recall that there are 5 "factors" or main effects. These are items, subcultures, sex, schools and case. Schools and case are random factors while the others are fixed. Cases are nested in sex by schools groupings and schools are nested in subcultures. This hierarchy along with items and sex are all crossed to give the 13 lines or sources listed above. There are two rather unusual features of this analysis. The first is the multivariate nature of the items. Analysis of variance can be justified here if all inter-item correlations are equal. In fact we know that certain items are more highly intercorrelated than others. However, we judge these inequalities are not great enough to make our analysis misleading.

The other feature is unbalance or lack of proportionality in numbers of cases in combinations of levels of the factors. This is a recurring difficulty with survey data. Our mean squares were obtained by using the PROC ANOVA calculation routine which is notorious for failing to do it correctly when data are unbalanced. Again, we have judged the particular unbalance here not to be too serious. We have verified that when effects are signalled by the F-tests one can easily find the comparisons (contrasts) responsible as we did above. There are ways to deal with unbalance, but they are excessively long to calculate when one has, as we do, 500 levels of the factor case code or even 20 schools and 13 items with sex by item by schools interactions. That is, one can create dummy variables and invert the design matrix but when more than four hundred such variables are required the cost of computation is not worth it.

Tables 5, 6, and 7 show three sets of item means. Standard errors for the means, computed in accord with the methods just outlined, are furnished for each of the subcultures. The subcultures differ in the relative usages of different methods. For example, inter-personal contacts are more common in the rural areas and more agency and media contacts are used in the urban setting. There were subcultural differences also in the reasons given for not getting the job wanted and there were interesting differences by males and females as Table 6 shows. Also of interest is the more frequent citing of reasons by females than by males.

Table 5. Mean Frequency[a] of Usage of Methods of Looking for Work by Subcultures

Method	Urban Black	Rural Black	Rural White
State employment office	.66	.93	.60
Private employment agency	.27	.13	.06
Community action or welfare	.29	.33	.17
Newspaper, TV, radio	1.38	1.07	.70
Telephoned or went around	1.46	1.53	1.35
Employer asked me	.54	.40	.63
Registered with union	.14	.10	.09
Parents or relatives	.73	.96	.94
Friends	.94	.75	.92
Teachers or counselors	.56	.36	.46
School placement service	.56	.28	.22
Applied for government job	.41	.38	.30
Applied to military	.16	.17	.15
Standard error for column	±.09	±.10	±.05

[a] 0 = "Never", 1 = "Sometimes", 2 = "Often".

Although the levels of satisfaction shown in Table 7 are generally high some low ratings were given by rural blacks to vocational programs and to variety of electives.

Inferring Mechanisms of Ambition Formation from Correlations

When data from only the baseline study of 1969 were available we still made inferences from observed correlations among variables to dynamic processes going on in the youths' own thinking and in their relationship with their parents, their friends, their schoolmates and their teachers. The basis for these inferences was discussed at some length in the baseline report. We concluded there that such inference was quite proper although considerable understanding of the causal connections is required and the data are best used to decide on presence or absence of some causal likage rather than be used to estimate its strength. Now with longitudinal data in hand our capabilities for dynamic inference should be greatly improved.

The statistical methods will be much the same as we used in analyzing the baseline data. This was, and is, essentially regression analyses.

Table 6. Things That Kept the Respondent from Getting the Jobs Wanted[a]

	Urban Blacks	Rural Blacks	Rural Whites	Males	Females
Not enough money for schools	.78	.90	.78	.70	.90
Lack of information on jobs	.60	.68	.62	.62	.63
My race	.47	.58	.04	.22	.23
My sex	.27	.34	.13	.06	.32
Didn't want to move away	.31	.61	.59	.49	.58
Not smart enough	.39	.30	.28	.24	.37
The schooling I've gotten	.18	.39	.24	.22	.28
Lack of jobs where grew up	.62	1.04	1.16	1.06	1.00
No chance to develop leadership	.46	.57	.40	.37	.51
Lack of parental interest	.32	.27	.20	.21	.26
Jobs getting scarce	.63	1.24	.72	.72	.87
No schools nearby	.13	.54	.41	.37	.38
Didn't know right people	.75	.73	.69	.68	.73
Too much effort to find right job	.35	.63	.20	.28	.33
Family responsibilities	.59	.53	.52	.21	.80
Standard error for column	±.07	±.07	±.04	±.05	±.05

[a] 0 = "Very little", 1 = "Some", 2 = "Very much".

Again, the clustered nature of the sample, that is, by the factor "schools", requires special attention. Our recommendation continues to be to sub-tract school means from all variables before entering them into the regressions. We also should probably do separate analyses for males and for females as well as for subcultures, although one might expect to find little or no differences in inter-variable relationship over the subcultures. This was what we found in the baseline analyses.

In the baseline analysis we were able to confirm the pivotal role of mental ability and family socio-economic status in forming ambitions. The mental abilities variable was measured by a group-administered Otis-Lennon mental abilities test, we will call this score IQ, and the status variable by an index, called FBK, composed of parents' occupational prestige

Table 7. Satisfaction[a] with Aspects of Respondents' High School Education

	Urban Black	Rural Black	Rural White
Basic academic	3.11	3.16	3.15
Practical work experience	2.60	2.43	2.45
Vocational programs	2.80	2.57	2.61
Variety of electives	2.96	2.21	2.61
Counselling	2.65	2.28	2.42
Attention to my individual needs	2.74	2.34	2.52
Good teachers	2.85	2.84	2.96
Extra-curricular	3.07	2.72	3.07
Equipment and library	3.11	2.43	3.04
Standard error for column	±.09	±.10	±.05

[a] 1 = "Very dissatisfied", 2 = "Somewhat dissatisfied", 3 = "Somewhat satisfied", 4 = "Very satisfied".

scores, parents' education and social participation items. At the second interview we asked about the student's grades during the current year, and the variable was denoted GTY; we also calculated a current family background score, called FBK2. At all three occasions we asked how far in school the youth aspired and expected to go and what job he/she aspired to have and the one he/she expected to get. We discussed just previously in this chapter how we scored the occupational and educational status projections. The resulting measurements are denoted, ED, OCC, ED2, OC2, ED3 and OC3. At the last interview occasion the youth, or many of them, had attained a job (or had held one in some year of the last five) and completed their schooling. These two variables are denoted ATOC and ATED. Finally, we asked a question about overall life satisfaction on a ten-step ladder and that has been included here as the variable SAT.

Means and standard deviations for these 13 variables appear in Table 8 and the correlations, adjusted for schools, are in Table 9. The largest correlations are .81 (FBK with FBK2, males), .69 (same for females) and .61 (GTY with ED2 for males). These may be due to correlations among the respective measurement errors. It is of interest to recognize this source of correlation since it has played a fairly important role in the study of young people's aspirations. For example, much has been made of high correlations between parental urging as reported by the youth and youth's self-reported aspirations. If the parents themselves are asked how high or low an occupational status they foresee for their child, such correlations become somewhat lower, as we showed in the baseline study. In the current sample, the .81 may also be due to missing data at the second interview being furnished from the first occasion. The measures on the

Table 8. Means, Standard Deviations and Sample Sizes for Thirteen Variables from the Longitudinal Sample

Variable	N	Males Mean	St. Dev.	N	Females Mean	St. Dev.
SAT	220	5.4	1.9	272	6.1	1.9
OC3	203	65.1	11.6	238	67.1	10.8
ED3	227	4.1	2.1	238	3.8	2.0
ATOC	237	48.7	13.6	287	54.2	10.3
ATED[a]	236	5.3	1.6	285	5.3	1.6
OC2	109	65.2	9.4	124	68.3	6.4
ED2	109	5.3	1.6	124	4.8	1.4
FBK2	68	134.0	24.3	84	137.2	20.6
GTY	109	115.3	19.4	124	117.2	22.9
OCC	237	66.7	11.0	287	70.7	7.6
ED	237	5.6	1.4	287	5.7	1.3
FBK	237	134.4	23.1	287	132.0	23.1
IQ	237	90.6	13.4	287	92.9	13.6

[a] The scale for ATED is slightly different from that for ED, ED2, and ED3. Subtracting 1.5 should make it more comparable.

two variables GTY and ED3 were obtained in the same interview situation and the correlations of .614 and .670 reflect to some extent the respondent's temporary optimism or pessimism.

The variables of central interest are OC3, ED3, OC2, ED2, OCC, and ED which reflect how young people set their goals for themselves. The mean levels of both job and schooling aspiration-expectations for both males and females generally drop from fifth-sixth grades to post-high school. A notable aspect is the rather sharp drop in educational aspirations of females at high school, that is from ED = 5.7 to ED2 = 4.8. This could be due to the females' greater involvement in marriage and household formation that took precedence over schooling at this late high school stage. The drop for males occurred, for similar or for other reasons, with ED2 = 5.3 at high school age and ED3 = 4.1 at adulthood.

Aside from those three correlations cited above for possible spuriousness, the level of inter-relationships among the variables is quite modest. The correlations between status projections four or five years apart is about .30 and drops to .15 or .20 at nine years apart--being a

Table 9. Inter-Variable Correlations Adjusted for Schools among Thirteen Variables from the Longitudinal Sample (Males above and Females below the diagonal)

Males	Third Longitudinal					Second Longitudinal				Baseline			
Females	SAT	OC3	ED3	ATOC	ATED	OC2	ED2	FBK2	GTY	OCC	ED	FBK	IQ
SAT	SAT	.03	-.06	.10	-.11	.09	-.09	-.11	-.04	.17	-.10	.02	-.05
OC3	-.02	OC3	.59	.36	.41	.26	.19	.33	.26	.06	.21	.26	.26
ED3	.04	.35	ED3	.23	.39	.31	.35	.30	.19	.16	.22	.31	.27
ATOC	.05	.36	.19	ATOC	.26	.26	.09	.04	.12	.03	.08	.20	.07
ATED	-.04	.25	.29	.30	ATED	.18	.45	.20	.41	.07	.21	.26	.26
OC2	-.01	.35	.19	.30	.27	OC2	.52	.41	.35	.28	.24	.20	.28
ED2	-.14	.24	.21	.21	.52	.38	ED2	.44	.61	.30	.34	.40	.29
FBK2	-.20	.45	.01	.31	.50	.25	.32	FBK2	.39	.20	.29	.81	.18
GTY	-.14	.08	.00	.02	.26	.14	.40	.19	GTY	.24	.22	.30	.31
OCC	.09	.18	.14	.06	.14	.18	.15	.08	.12	OCC	.24	.12	.15
ED	.01	.16	.23	.19	.18	.18	.20	.15	.14	.21	ED	.31	.28
FBK	-.08	.24	.28	.16	.38	.25	.25	.69	.25	.15	.26	FBK	.33
IQ	-.05	.28	.18	.18	.26	.06	.21	.24	.18	.06	.24	.35	IQ

bit higher for males than for females. Notice that $.30^2 = .09$ is less than the .15 observed. This suggests some consistency, albeit considerable flexibility, in setting their goals among youth. Mental abilities and higher family socio-economic status tend to raise ambitions over the whole period but the effect is none too strong and does not completely account for the youth's consistency.

The background variables (IQ, FBK, GTY, FBK2) and ambition variables (ED, OCC, etc.) are more highly correlated with attained education (ATED) than with attained occupational prestige (ATOC). This could be because some youth are working in somewhat lowly jobs while being trained for a higher status job. At any rate, occupational aspirations are more closely correlated to other variables than is attained occupation, ATOC.

The correlations between life satisfaction rating and the background variables—the negative ones, that is—are most interesting. Higher family background at time two (1975) and higher GTY, grades during the current year (also in 1975), may have created hopes, not all reflected even in ED2 and OC2, for a brighter future than actually came about four years later. The negative correlations between SAT and ATED as well as with IQ may also mean that dissatisfaction is disappointment. Further discussion of these issues is a major concern of Chapter IV, Parts 1 and 2.

Cohort Comparisons

We presented results on cohort changes in Table 3 without extensive commentary on the statistical significance of the trends. In this section we consider how to calculate standard error for changes in the three cohorts. There are two approaches. The computationally more elegant one

Table 10. Changes in Fifth-sixth Grade Children's Scores on a Number of Variables Related to Aspirations over Three Cohorts. (First = 1969, Second = 1974, Third = 1979).

Variable		Second -First	Third-Second	Third -First	SE
ED	Educational aspiration-expectation	-.18	-.02	-.15	±.14
OC	Job status projection	-.65	.42	-.23	±.77
AC	Academic liking score	-.16	.00	-.15	±.05
DM	Mother was demanding	.32	-.09	.23	±.05
PU	Mother was punishing	1.69	-.05	1.64	±.04
LV	Mother was loving	-.49	-.14	-.63	±.05
IND	Mother used independence	-.16	.05	-.11	±.04
SEL	Self-concept score	-.06	.02	-.04	±.02

uses a linear regression model with a factor "cohort" having three levels and other factors (independent variables) such as sex, subculture, and schools as a random factor. This method is suspect because of unbalance in the data and we therefore compared its results to a second, methodologically sounder, method. In this second approach we cross-classified the cases by sex and by grade in a particular school and looked to see whether there were also such cases in each of the cohorts. If five or more such cases were present for any cohort we computed their mean. Then, to obtain an estimate of change from one cohort to the next we calculated differences of these means whenever both cohorts had a mean in the same cell and averaged them over grades, schools and sexes. This second method is discussed and illustrated by Yates (1981). It turned out that the linear model results agreed in judging significances of cohort differences with this more tedious and traditional approach.

The results in Table 10 suggest that over the ten-year period rather definite changes took place in the mothers' child-rearing behavior—at least according to the childrens' ratings of frequencies at which their mothers behaved in characteristic ways towards them. Loving behaviors dropped steadily. This may reflect a retreat from the so called "permissiveness" of the sixties, although we are using a 15-item LV score from which three "indulgence" items are missing. Both demanding and punishing behaviors increased and then leveled off. The mothers' use of independence training practices also dropped and then leveled off. Among the children the popularity of school-related activities dropped and then leveled off. There were relatively few changes from 1969 to 1979 in self-concept score and in the status projections scores.

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CHAPTER IV
FINDINGS

This chapter is divided into five parts each representing the major variables of this study. The topics include findings from the three developmental periods for which data were available for sample members: at fifth and sixth grades, late high school age, and young adulthood or four years beyond the age of high school graduation. Each part was written by one of more members of the regional committee. Notations about contributors are included on the first page of each part.

Parts One and Two deal with the occupational aspirations and expectations of males and females. Both parts trace the occupational plans of children and youth and present the continuities and changes in the plans along with adult attainment. Because of the changed, and still changing, career orientations of women in America, a separate section in Part Two includes the extent to which girls and female youth choose traditionally feminine jobs and an examination of the effects of marriage and family plans on the occupational choices of female youth.

Educational aspirations and expectations for both males and females are presented in Part Three. The primary focus is on the stability and change over time for the total sample; however, differential aspirations and expectations are examined by sex.

Part Four deals with the important persons who influenced the life patterns and goals of the youth. One focus of this part is an examination of the changing patterns of significant others who influenced plans of black and white youth during early adolescence, late adolescence, and early adulthood. A second focus area is a comparison and examination of the different patterns of significant other choices for occupational plans with the significant other choices for marriage and fertility plans.

Part Five is an investigation of how the sample men and women, in their early adult years, viewed their present life circumstances and their prospects for the future. Reported are the respondents' sense of satisfaction with their lives generally and specifically in four areas: educational experiences, occupational achievements, residential locale and living arrangements, and marital relationships whenever applicable. Information is also provided about how the respondents compared their present life circumstances to those of five years ago, and how they perceived their prospects for the future. Differences are reported for men and women whenever they occurred.

FINDINGS

Part 1: Changes and Continuities in Occupational Plans of Males

by

William F. Kenkel

The purpose of this first section of the findings chapter is to trace the occupational plans of children and youth. Thus it deals with the occupational aspirations and expectations of children in the fifth and sixth grades of school, their aspirations and expectations at late high school age, and their initial occupational attainments as young adults four years beyond the age of high school graduation. Because of the changed, and still changing, career orientations and occupational goals of women in American society, it is desirable to deal separately with the occupational plans of males and females. Accordingly, this first part deals with an analysis of the continuities and changes in the occupational plans of males. Chapter 4, Part 2, consists of a parallel analysis for females and also includes two special analyses, one dealing with the extent to which girls and female youth choose traditionally feminine jobs, the other examining the effects of marriage and family plans on the occupational choices of female youth.

Occupational Plans of Grade School Males

The occupational plans of grade school youth were measured by two questions. The first read: "If you could choose any job you wanted, what kind of job would you really like to have when you grow up?" Responses to this question are defined as occupational aspirations. A second question asked: "What kind of job do you think you really will have when you grow up?" Responses to this question constitute the operational definition of occupational expectations.

Both occupational aspirations and expectations were given an appropriate occupational prestige score according to Duncan's Socioeconomic Index (Reiss, 1961). These occupational prestige scores ranged from 42 to 89. Occupational choices were also categorized according to the nine-point Census classification system, which ranges from professional-technical (1) to laborer (9). A high correlation coefficient ($r = .88$) between these two measures of occupational prestige was found for the present sample. Because it is easier to note and describe the kinds of occupations to which children aspire and which they expect to fill with the Census categories, the analyses will chiefly use those categories.

The occupational aspirations and expectations of black and white males are presented in Table 1.1. There are several points worth noting with regard to these data. First, for both races there are differences between aspirations and expectations. This suggests that even at grade school age children are able to distinguish between the jobs they would like to have and the jobs they think they really will have. With the exception of the

Table 1.1. Occupational Aspirations and Expectations of Grade School Boys, by Race

Occupational Category	Black Aspirations (n = 207)	Black Expectations (n = 201)	White Aspirations (n = 255)	White Expectations (n = 240)
Professional-technical (1)	53.6	48.3	42.0	35.4
Farmer-farm manager (2)	-	-	6.3	10.4
Manager, official, proprietor (3)	3.4	3.0	2.0	.83
Clerical-sales (4)	1.0	1.0	2.4	2.9
Craftsman, foreman (5)	13.5	14.4	16.9	20.0
Operative (6)	6.8	8.5	14.1	17.1
Service, private household (7)	12.1	11.9	11.0	5.8
Farm laborer, foreman (8)	1.0	-	.8	1.3
Laborer (9)	8.7	12.9	4.7	6.3

Note. Data are in percentages.

choice of farmer among white boys, there were fewer boys who named the higher-prestige occupations as the ones they expected to have than named them as the ones they would like to have; and, correspondingly, more boys expected to fill the lower occupational ranks than aspired to such jobs. In other words, expectations were generally lower than aspirations. An extremely large proportion of the boys aspired to, and expected to fill, high-prestige occupations. Among black boys, 57% aspired to occupations that fall within the highest three categories, with most of these occupational choices classified as "professional-technical". About 51% of their expectations fell within the same categories. White boys did not have occupational goals quite as high but, still, 50% of their occupational aspirations and 46% of their occupational expectations fell within the highest three prestige categories.

The concentration of occupational choices of boys in the high-prestige categories is particularly interesting in light of their family background. The parents of these students had fairly low levels of education. Among whites, about 85% of the fathers and 80% of the mothers had not finished high school. Among blacks, 95% of the fathers and 90% of the mothers had less than a high school education. In 1969, about 83% of the white fathers were usually employed but in about 7% of the cases there was no father present in the home. Among blacks, the employment rate was considerably lower with 68% usually employed. In about 22% of the black families there was no father in the home. With regard to parents' type of occupation, 14% of the white fathers and 7% of the black fathers were farming land they owned and another 3 to 4% of each group were working as farm laborers. Of the white fathers, about a quarter were employed as craftsmen, another quarter as operatives, and 14% as nonfarm laborers. The most frequently named occupational category for black fathers was nonfarm laborer, with about 30% in this category, twice the number for the whites. About 7% of black fathers were in each of the occupational categories of craftsmen, operatives, and service workers.

About half of the white mothers were working outside the home when the child was in the fifth or sixth grade of school and the same was true of 60% of the black mothers. The most common occupations of white mothers were operatives (12%), clerks (6%), laborers (5%), and service-household workers (5%). By contrast, most (40%) of the black mothers were engaged in service-household work; smaller numbers worked as laborers (3%) and operatives (5%).

Factors Associated with Occupational Aspirations

Despite their low socioeconomic background, the boys in the present study, as has been noted, predominantly aspired to occupations at high-prestige levels. Yet there was variation within the study sample. Since the emphasis in this bulletin is on changes in occupational plans over the years, no detailed analyses were made to attempt to account for the variation in the levels of occupational aspirations exhibited by the boys. In Table 1.2, however, the major factors associated with occupational aspirations are presented. In nearly all cases the factors were also related to occupational expectations and the coefficients of correlation were of the same magnitude. Non-significant coefficients of correlation are reported when, theoretically, one would expect a relationship.

The factors related to occupational aspirations and expectations, presented in Table 1.2, have been grouped as: (a) background factors, (b) parenting factors, and (c) characteristics of the child. Among the background factors, only father's occupation and education were related to boys' occupational choice at a statistically significant level. Father's occupation was associated with the boy's occupational aspirations while father's occupations and education were associated with the boy's occupational expectations. Mother's occupation and mother's education were related to boys' occupational choices in the same direction but not significantly so. Thus, even among respondents at a relatively low socioeconomic level, the higher the status characteristics of a boy's parents, particularly the higher the prestige of the father's occupation and the higher his education, the higher the boy's occupational choices.

Parenting behavior was measured by two sets of factors: (a) how the boys perceived their mother's parenting behavior and (b) the mother's aspirations for the child including the mother's achievement value and anomie scores. Perceived parenting was measured by the boy's responses to the Bronfenbrenner Parent Behavior Questionnaire (Devereaux, Bronfenbrenner, & Rodgers, 1969). Siegelman (1965) conducted a factor analysis of the scale items determining three dimensions that he labeled "loving",

Table 1.2. Factors Associated with the Occupational Aspirations and Expectations of Grade School Boys

Factors	Coefficients of Correlation	
	Aspirations	Expectations
Background factors		
Father's occupation	.13*	.12*
Mother's occupation	.02	.05
Father's education	.06	.10*
Mother's education	.08	.03
Parenting factors		
Mother's occupational wishes for boy	.20*	.17*
Mother's occupational expectations for boy	.19*	.19*
Mother's achievement value	.12*	.13*
Mother's anomie	-.14*	-.10*
Mother perceived as loving	.10*	.09
Mother perceived as demanding	.06	.09
Mother perceived as punishing	-.07	.04
Child's characteristics		
Intellectual ability	.13*	.13*
Self-confidence	.08	.04
Educational aspirations	.16*	.11*
Educational expectations	.19*	.21*

*Indicates statistical significance at the .05 level or beyond. Other correlation coefficients not statistically significant.

"punishing", and "demanding" (p. 163). A similar factor analysis by Proctor, the statistician on the present regional project, found essentially the same groupings (Project S-63, 1974, p. 54). Of the three parenting styles, only one had a significant relationship with either of the occupational choice variables.

The more loving the perceived parenting, the higher the boy's occupational aspirations (See Table 1.2). Perception of demanding parenting, which describes a strict but positive parenting style, was positively related to boy's occupational choices (aspirations and expectations) but not at a statistically significant level. Perception of punishing parental behavior was negatively related to aspirations but the correlation coefficient was, again, not statistically significant.

With regard to the mother's aspirations for her child, the higher her occupational wishes and expectations for the boy, the higher were the boy's occupational aspirations and expectations. Mothers also responded, in an agree-disagree format, to seven items from an achievement value orientation scale used by Rosen (1956) in a study of the values of mothers and their sons. Rosen reported that the items were modifications of Kluckhohn's schema, which had been shown to be related to achievement in our society. In the present study it was reasoned that mothers valuing achievement would rear their children to have similar values and thus the more the mother valued achievement the higher would be her son's occupational aspirations and expectations. The data from this study with statistically significant correlation coefficients support this hypothesis.

Another value-set of mothers thought to be related to sons' aspirations and expectations was anomie-alienation. Persons scoring high on anomie have a pessimistic view of society and of the chances of getting along well in today's world. They would agree with statements which said, in effect, that the life of the average person is getting worse, that a person has to live for today only, that a person doesn't know on whom he can count, and the like. These sorts of attitudes, if communicated to a son through childrearing, would not appear to be conducive to encouraging the sons to aspire to high levels of occupational achievement. Mother's anomie-alienation was measured in this study by six items from Leo Srole's Anomia Scale as described by Bonjean (1967, p. 33-37). The statistically significant correlation coefficient supports the hypothesis that the higher the mother's anomie the lower the son's occupational choices.

There is evidence, therefore, that parenting behavior affects the occupational choices of grade school males. The higher the mother's occupational and educational wishes for the child, the higher the mother's achievement values and the lower her anomie, the higher are the son's occupation aspirations and expectations. The boy's perception of having a loving mother is also positively associated with higher aspirations.

Three characteristics of the boy himself were tested for a relationship with his occupational choices: (a) educational aspirations and expectations, (b) intellectual ability, and (c) self-concept. The finding of a positive, statistically significant correlation between educational and occupational aspirations and expectations indicates a certain consistency, and perhaps realism, in the life plans of grade school boys. Those who aspire to and expect higher occupations tend, at least, to aspire to and expect higher educational levels. Intellectual ability was measured in this study by the Otis-Lennon mental ability test (Otis, 1969). It was found that the higher the score on this test, the higher were the boys' occupational aspirations and expectations. This suggests a certain realism in the occupational choices of grade school boys in that those who aspire to higher occupational levels tended to be those whose intellectual ability was more likely, relative to this sample, to allow them to pursue the necessary education to obtain their occupational goals. Interestingly, there was a slightly stronger relationship between educational expectations and both occupational aspirations and expectations than there was for educational aspirations.

A child's self-concept is an important social psychological characteristic, and a vital construct for other characteristics. Theoretically, how children perceive themselves should be related to what they do, and what they attempt to do. It was therefore hypothesized that the higher a boy's self-concept, the higher would be his occupational choices. Scores on Lipsitt's (1958) self-concept scale were used to test this hypothesis. Although the correlation coefficient showed a relationship in the hypothesized direction, the relationship was not statistically significant.

This concludes the description of the occupational plans or choices of grade school boys and the factors associated with such plans. The next task is to investigate the occupational goals of the same boys when they were interviewed six years later.

Occupational Plans of High School Boys

What happens to the occupational plans of boys as they grow up and move from grade school to high school? This question is addressed in several ways. First, we present a general description of the occupational aspirations and expectations of the high school aged males. From this it can be discerned to what extent the pattern of occupational plans found when the boys were of high school age differs from that discovered six years earlier. Next, the factors associated with the occupational aspirations and expectations of high school males are presented. For the most part, the same background, parenting, and personal characteristics tested for an association with the life plans of grade school boys are retested for an association with their plans six years later. Then the change pattern exhibited by the youth is examined to discover how many retained their aspirations and expectations, how many changed their plans, and in which direction (lowering or raising of aspirations) change took place.

Theoretically, one should expect a sample of boys to exhibit a different pattern of occupational choices at high school age than they did as fifth and sixth graders. Occupational choice is viewed as a developmental process (Curry & Picou, 1971; Ginzberg et al., 1951) with occupational goals evolving or developing as one matures and learns more about himself or herself and the world of work. Ginzberg and his associates (1951) suggested that there were three developmental stages in the occupational choice process: (a) the fantasy stage, (b) the tentative stage, and (c) the realistic stage. At the fantasy stage, children are apt to focus on glamorous occupations. At the tentative stage, the youth relate their own interests and abilities to possible occupational choices and focus on the requirements for attaining occupational goals. The realistic stage is reached at early adulthood when one takes a job or starts to get additional training for a particular job or at least particular kinds of work. Thus, the fifth and sixth graders in our sample were at what Ginzberg would call the fantasy stage of occupational choice. When they were juniors or seniors in high school, they would seem to fall near the end of the tentative stage and close to the beginning of the realistic stage. The high school seniors, for example, were only months away from the time when they would have to decide whether to continue their education or to enter the job market and, if the latter, they would soon have to decide what kind of work they would not only like to have but could reasonably do. Thus, at late high school age, one would suppose that the youth would have considered their own interests and abilities and would have thought about what was needed to prepare for and enter various occupations. At the grade school level, or fantasy stage, there would have been little attention focused on such factors. Therefore, one would expect changes in occupational choices from grade to high school age. The direction of the change would differ from individual to individual as each tested his personal desires, limitations, abilities, and means against the perceived reality. For the sample as a whole, however, it would be expected that reality testing would result in occupational choices at high school age

Table 1.3. Occupational Aspirations and Expectations of High School Aged Boys, by Race

Occupational category	Black Aspirations (n = 207)	Black Expectations (n = 201)	White Aspirations (n = 255)	White Expectations (n = 240)
Professional-technical (1)	41.8	28.2	28.7	16.1
Farmer-farm manager (2)	.5	.7	2.1	6.2
Manager, official, proprietor (3)	6.4	6.1	8.4	4.3
Clerical-sales (4)	5.4	6.1	2.5	2.4
Craftsman, foreman (5)	28.1	23.3	27.4	24.2
Operative (6)	12.3	21.5	20.3	28.0
Service, private household (7)	3.0	6.7	5.9	3.3
Farm laborer, foreman (8)	-	-	-	1.0
Laborer (9)	2.5	7.4	4.6	14.7

Note. Data are in percentages.

more consistent with the distribution of occupations found in our society than they were at grade school age. What, then was discovered concerning the occupational aspirations of black and white high school aged males?

Almost half of the black (48%) but slightly less than half (40%) of the white male youth still aspire to occupations that fall within the highest three prestige categories. As shown in Table 1.3, professional-technical occupations are the dominant aspirations. The two blue collar categories of craftsman and operative are named by 40% of the black and 48% of the white male youth. The proportion of the youth who aspire to the higher-level occupations exceeds the proportion of employed persons in the United States found in these occupations. As a corollary, the proportion of the youth from the low-income sample families who aspire to lower prestige blue collar jobs is smaller than the proportion of all persons presently employed in such jobs.

For some occupational levels, there were greater differences between aspirations and expectations at high school age than there were six years earlier. For example, at grade school level only about 5% fewer males expected to hold professional-technical jobs than aspired to such jobs.

At high school age, there was a difference of 12 percentage points between expectations and aspirations, more than doubling the earlier difference between the two. The reverse pattern prevailed for jobs classified as operatives. This suggests that there has been a certain amount of reality testing. A large proportion say they would like to hold professional jobs, for example, but the proportion that actually expects to hold such jobs dropped considerably. Only about 12% of the black youth really wanted to be operatives but almost 22% actually expected to end up in such jobs. The comparable figures for white males aspiring to and expecting to hold operative jobs are 20% and 28%.

Factors Associated with Occupational Plans

Once again three major factors composed of variables relating to (a) parent's background, (b) parenting behavior, and (c) the child's own individual characteristics were assessed for an association with the high school-aged youth's occupational plans. The background factors of father's and mother's occupational and educational levels found to be associated with the boy's occupational goals at grade school also were found to be associated with their plans at high school age. In general, these factors are more strongly related to the aspirations and expectations of high school boys than they are to the goals of high school girls, as will be shown in the next section of this chapter.

As shown in Table 1.4, the higher the mother's occupational wishes and expectations for her son, the higher are his own aspirations and expectations. The correlation coefficients are somewhat lower than those found at grade school level, particularly the correlation between mother's occupational wishes and son's expectations. It must be recalled that the perceived parenting behavior of the mother was measured only in 1969, six years prior to the measurement of the goals of the sons at high school age. It would seem that the mother's occupational wishes and expectations for her son, as measured when he was in grade school, still affect his goals at high school age.

Other parenting behavior measurements used to test for an association with the high school males' occupational plans were mother's achievement motivation and anomie. The higher the mother's achievement value, the higher were the boy's occupational aspirations and expectations. Conversely, the lower the mother's anomie, the higher were the boy's aspirations and expectations. These maternal characteristics, coupled with the mother's occupational wishes and expectations for her son, suggest a continuing maternal influence on the occupational plans of boys.

All of the individual characteristics of the boys themselves measured in this study showed a positive relationship with occupational aspirations and expectations. Intellectual ability showed a slightly stronger association with the boy's goals as measured at high school age than it did when their goals were measured at grade school age. Interestingly, as reported in the next section, intellectual ability was not found to be associated with the occupational goals of high school girls. As for the males, the finding that the higher the intellectual ability the higher are the occupational goals suggests a certain realism in their occupational aspirations and expectations. To some degree, at least, the abilities of the high school boys are consistent with what would be required by the kinds of jobs

Table 1.4. Factors Associated with the Occupational Aspirations and Expectations of High School Boys

Factors	Coefficients of correlations	
	Aspirations	Expectations
Background factors		
Father's occupation	.12*	.10
Mother's occupation	.11*	.001
Father's education	.10*	.11*
Mother's education	.17*	.14*
Parenting factors		
Mother's occupational wishes for boy	.10*	.04
Mother's occupational expectations for boy	.16*	.13*
Mother's achievement value	.13*	.12*
Mother's anomie	-.17*	-.16*
Youth's characteristics		
Intellectual ability	.16*	.20*
Educational aspirations, grade school	.14*	.18*
Educational expectations, grade school	.17*	.14*
Educational aspirations, high school	.34*	.43*
Educational expectations, high school	.41*	.40*
Confidence in attaining desired job	.18*	-

*Indicates statistical significance at the .05 level or beyond. Other correlation coefficients not statistically significant.

to which they aspire. Realism and consistency are further indicated by the fairly high correlation coefficients, ranging from .34 to .43, between educational goals and occupational goals. Finally, the stronger the boys' feelings of confidence that they will get the kind of job to which they aspire, the higher are their occupational aspirations. In contrast, at grade school level self-concept did not exhibit a significant relationship to occupational plans.

Changes in Aspirations and Expectations

In Table 1.5 are shown the differences in aspirations and expectations between the two time periods (grade school and high school) which were obtained by algebraically subtracting the percent choosing an occupational category at grade school age from the percent choosing that same category at high school age. With regard to aspirations, the largest change was in the professional category, down between 12 to 13 percentage points from

Table 1.5. Differences in Occupational Aspirations and Expectations of Males from 1969 to 1975, by Race

Occupational category	Black: Aspirations (n = 207)	Black: Expectations (n = 201)	White: Aspirations (n = 255)	White: Expectations (n = 240)
Professional-technical (1)	-11.75	-20.04	-13.27	-19.31
Farmer-farm manager (2)	+.49	+.69	-4.16	-4.26
Manager, official, proprietor (3)	-.60	+3.14	+6.48	+3.44
Clerical-sales (4)	+4.45	+5.13	+.18	-.55
Craftsman, foreman (5)	+9.55	+8.88	+10.57	-4.17
Operative (6)	+5.56	+13.01	+6.13	+10.88
Service, private household (7)	-9.12	-5.19	-5.07	-2.51
Farm laborer, foreman (8)	-	-	-	-
Laborer (9)	-6.24	-5.58	-.07	+8.44

Differences in percentages in occupational categories

what it was six years earlier. The largest change in aspirations is the increase in the proportion choosing jobs in the craftsman-foreman category, up nearly 10%. Turning to expectations, the largest drop is in the proportion choosing professional jobs, the same as for aspirations. The largest increase in expectations is found in the operative category, up between 11 to 13%. The pattern of changes in aspirations and expectations suggests that as the youth approach the time when they must enter the job market or decide on further training they change their occupational expectations. Apparently, they find it harder to change their minds regarding what they would really like to do for a living since the degree of change was less for aspirations than it was for expectations. This leads to the implication that aspirations at grade school level were not idle dreams of fancy but to some extent represented real goals which are modified with reluctance.

The foregoing analyses were concerned with the changes in occupational aspirations and expectations exhibited by the sample as a whole. A more sensitive test of the changes in occupational plans between grade and high school ages can be made by constructing cross-tabulations of the job level named at grade school age by the levels named at high school age. Such a cross-tabulation shows, for example, what occupational category those who originally chose the highest category later chose at high school age. Thus, it indicates how many individuals were consistent over the six-year period and which occupational levels were chosen by those who were inconsistent. The levels of occupation were constructed by considering the highest three census categories "high", the next three "medium", and the lowest three "low". Data for these analyses consist only of those cases where there is complete information for the three time periods; grade school level, high school level, and young adulthood. This was done because in a later section we relate the occupational plans at the first two stages to occupational attainment as young adults. Previous analyses in this chapter used all of the respondents interviewed at grade school age from whom information was also obtained at high school age, whether or not they were reinterviewed as adults.

A high proportion of both black and white grade school children aspired to occupations that are categorized as high, so particular attention should be devoted to this group. As shown in Table 1.6, 64.4% of the black and 59% of the white grade school males named high level occupations both at grade and high school levels. Although the remainder lowered their occupational aspirations, it should be noted that most of those who originally chose a high level occupation chose a medium level occupation at high school age. At high school age, the smallest proportions choosing a low level occupation, 4.4% and 7.6% for black and white boys respectively, were those who earlier had aspired to a high level occupation.

The black grade school boys who originally chose a medium level occupation were quite consistent over the six years with 68.7% of them choosing an occupation in this category at high school age. Among white boys, 52.9% chose a medium level occupation at both time periods. It can also be noted from Table 1.6 that more of both black and white boys who changed their aspirations from a medium level job moved to a higher level job than to a lower level one. Those who originally chose a medium level occupation less frequently chose a low level job at high school age than did those who originally chose a low level job. Those originally choosing a medium level job, however, later more frequently chose a low level job, 6.2% and 8.8% for black and white boys respectively, than those who originally chose a high level job, 4.4% and 7.6% for black and white respectively.

Among the total sample of male grade school respondents, about 22% of the black and 16% of the white boys (see Table 1.1) aspired to occupations that were at the lowest of the three occupational levels. This group, as shown in Table 1.6, proved to be the least consistent in their occupational aspirations. Of all the black boys who at grade school age chose a low level occupation, only 14% named an occupation at this level at high school age. More white boys, 28.6%, were consistent over the six year period. Half of the white boys who were inconsistent moved to a medium level occupation, half to a high level occupation. Twice as many black males who originally chose a low level occupation moved to a medium level one as moved to a high level one. Boys who aspired to a low level occupation at grade school age more frequently selected a low level occupation at high school age than did boys who originally aspired to medium and high level occupations.

Table 1.6. A Comparison of the Percentages of Males Naming Occupational *Aspirations* at Grade and High School Levels

Occupational level, grade school	Occupational level, high school		
	Low	Medium	High
		Black males (*n* = 75)	
Low	$\boxed{14.2}$	57.1	28.6
Medium	6.2	$\boxed{68.7}$	25.0
High	4.4	31.1	$\boxed{64.4}$
		White males (*n* = 114)	
Low	$\boxed{28.6}$	35.7	35.7
Medium	8.8	$\boxed{52.9}$	38.2
High	7.6	33.3	$\boxed{59.0}$

Note. Levels constructed by considering highest three census categories "high", middle three "medium", and lowest three "low". Boxed percentages indicate those who named occupations in identical categories at both time periods.

There is considerable evidence from the foregoing analysis that the occupational aspirations of high school males are influenced by, or at least related to, the aspirations they held at grade school age. The bulk of the group originally chose a medium or high level occupation (see Table 1.1). Of this group from over half to two-thirds later chose an occupation in the identical category. However, few of those who originally named a low occupational category retained that selection as high school youth.

While, basically, a large proportion of males retained their occupational goals, this was not true regarding the occupations they expected to hold (Table 1.7). Of the black males who as grade school boys expected to hold a high level occupation, only 32% still expected to do so at high school age. White boys exhibited the same pattern with 43% of those who originally expected to hold high level jobs retaining this expectation at high school. From the table it can also be seen that from 17% to 40% of the white high school-aged males expected to hold low level jobs, with the lower their expectations at grade school the more frequently they expected, at high school age, to hold a low level job. It is also true that the higher the expectations were at grade school the more frequently the high school youth said he expected to fill a high level occupation. Thus, 43% of those who originally expected to fill a high level occupation stated this occupation at high school age as compared to 20% and 10% of those who first expected to fill medium and low level jobs respectively. While more of the males lowered their expectations than did their aspirations, when the two analyses of aspirations and expectations are compared,there is nevertheless evidence of a continuity and consistency in the occupational

Table 1.7. A Comparison of the Percentages of Males Naming Occupational Expectations at Grade and High School Levels

Occupational level, grade school	Occupational level, high school		
	Low	Medium	High
		Black males (*n* = 52)	
Low	$\boxed{26.7}$	40.6	33.3
Medium	0.0	$\boxed{66.7}$	33.4
High	8.0	60.0	$\boxed{32.0}$
		White males (*n* = 101)	
Low	$\boxed{40.0}$	50.0	10.0
Medium	22.2	$\boxed{57.7}$	20.0
High	17.3	39.1	$\boxed{43.4}$

Note. Levels constructed by considering highest three census categories "high", middle three "medium", and lowest three "low". Boxed percentages indicate those who named occupations in identical categories at both time periods.

expectations of low-income males. The next line of inquiry concerns the actual job attainment of these low-income young men.

Occupational Attainment of the Young Adults

In 1979, ten years after their first interview as fifth or sixth graders and four years after their second interview as juniors or seniors in high school, the respondents were interviewed for the third time. We refer to this as the young adult stage. Data on the occupational attainments of young adult males, and how attainments compare with earlier aspirations and expectations, are presented in three different forms. First, Table 1.8 shows the census classification of the jobs in which the young adults are employed. In Table 1.9 the nine job categories have been collapsed into three--high, medium, and low --by considering the top three census categories *high*, and so on. Table 1.9 also shows the proportion of those at grade and at high school who chose a job that fell in each collapsed category. The third type of analysis, Tables 1.10 and 1.11, consist of cross-tabulations of original aspirations by present attainments. Thus these data show what proportion of youth who aspired to a certain occupational level have in fact achieved that level.

Some caution is needed in interpreting the data pertaining to occupational attainments. It should be kept in mind that the interviews were conducted when the respondents were 21 or 22 years of age. In subsequent years they can be expected to change occupations with the result that their

Table 1.8. The Occupational Attainment of Presently Employed Young Adult Males

Occupational category	Black		White	
	n	%	n	%
Professional-technical (1)	4	7.0	10	9.6
Farmer-farm manager (2)	-	-	-	-
Manager, official, proprietor (3)	2	3.5	3	2.9
Clerical-sales (4)	8	14.0	10	9.6
Craftsman, foreman (5)	6	10.5	23	22.1
Operative (6)	10	17.5	18	17.3
Service, private household (7)	7	12.3	8	7.7
Farm laborer, foreman (8)	3	5.3	2	1.9
Laborer (9)	17	29.8	30	28.9

occupational attainments at some later date may be closer to their earlier aspirations than are their attainments as young adults. This would seem to be particularly true of those who aspired to technical or professional occupations, for there were scarcely enough years between high school graduation and the reinterview for these young adults to prepare for and enter such occupations. To assess the magnitude of the probable undercounting of attainment of high level jobs, analyses were made of the number of those who aspired to professional or technical jobs who were currently enrolled in college or graduate school. It was determined that only 10 black young adults were in college at the time of the interview and another 5 were in graduate or professional school. Among the white males, 8 were in college but none were in graduate school. It is likely that many of the young adults still pursuing higher education ultimately will find work in their chosen fields. Full time students have not, however, been included in the count of those who are presently employed. There were also a few cases in which a respondent was both working and going to college. It is reasonable to expect that the job they acquire after graduation will be at a higher level than the one they now hold but, of course, that cannot be determined with certainty. Nevertheless, not knowing the ultimate occupational attainments of those who are in college on a full- or part-time basis probably results in a slight undercounting of the attainment of high level positions.

Table 1.9. Percent Black Males Naming Occupational Level at Grade and High School and Adult Attainment

Occupational levels	Grade school Aspirations	Grade school Expectations	High school Aspirations	High school Expectations	Adult attainment
			Black males		
Low	21.75	24.88	5.42	14.11	47.36
Medium	21.26	23.89	45.42	50.91	42.11
High	57.02	51.25	48.6	35.04	10.02
			White males		
Low	26.47	13.33	10.55	18.96	38.46
Medium	33.33	40.00	50.21	54.50	49.05
High	50.19	46.67	39.24	26.54	12.50

The occupational distribution of the employed males is shown in Table 1.8. These data can be compared with those in Tables 1.1 and 1.3 respectively to learn how the attainments for the sample as a whole relate to the aspirations and expectations at grade and high school levels. For example, while over half of the black males aspired to a job in the professional-technical category at grade school age and 42% aspired to a job at this same level at high school age, only 7% were actually working at such a job at the time of the interview. Relatively few males (less than 10%) aspired to jobs classified as laborer either at grade or high school levels but almost 30% were currently working at such jobs at the time of the third interview.

The existence of data on both occupational aspirations and expectations at grade school and high school age and on occupational attainments as young adults, all in terms of nine census categories of occupations, makes for some complexities in analyses. For some analyses, therefore, the nine census categories of occupations were collapsed to three and labeled "high", "medium", and "low". This system is employed in Table 1.9 which shows the occupational aspirations and expectations at grade school level, high school level, and the respondents' occupational attainments as young adults.

The data in Table 1.9 show a striking lack of goal attainment among black males. As children, over half aspired to and expected a high level job and as high school youth almost half still aspired to such jobs while over a third still expected to achieve them. Yet only 10% of the young adults were actually working at high level jobs. As children, less than a quarter either aspired to or expected to be working at the lowest level jobs such as laborer and service worker. As high school youth, even fewer (only 5%) aspired to such jobs while only 14% expected to be working at them. Yet almost half of the black young adults were actually employed in such jobs.

The lack of goal attainment among white males is just as vivid as among black males. Only 12% of the white males were actually working at high level jobs while about half aspired to and expected such jobs as children and almost 40% still aspired to high level jobs as high school age youth.

There are some interesting racial differences, however, in the occupational goal attainment process. At both grade and high school levels, a higher proportion of blacks than whites both aspired to and expected to achieve high level jobs. Yet more whites than blacks are actually holding high level jobs as young adults. Table 1.9 also shows that at both grade school and high school levels more whites than blacks named low level occupations as the ones they really wanted or expected to have. But more blacks than whites are actually working at low level jobs. The implication is strong that despite their higher goals, blacks will achieve their occupational goals less frequently than whites.

The final analysis of the extent to which the males achieved their occupational ambitions is presented through a cross-tabulation of grade or high school aspirations by adult attainment according to one of three levels of occupation (Tables 1.10 and 1.11). By reading across the rows it can be determined what proportion of those who earlier chose a certain occupational level are presently working at that level. It can also be determined, of course, at what level those who did not achieve their aspired level are working. It should be pointed out that these analyses are based on a reduced number of respondents, ranging from 49 to 52 blacks and 86 to 103 whites. The reduced sample size is due to the fact that the analyses are based on only those who were located as young adults, who provided information on their current job, and from whom information was available at both grade and high school levels.

From Table 1.10 it can be noted that only 16% of the black males who aspired to high level occupations at grade school age were actually working at such jobs as a young adult. Indeed, many more are working at low level than medium level jobs. Half of those who as grade school children aspired to medium level jobs, however, have achieved their aspirations. Turning to the aspirations of the black males at high school age, only 11% of those who aspired to high level occupations actually achieved them. Of the remainder, more are working at medium level than at low level jobs, suggesting that their high aspirations were at least partially rewarded. Those who aspired to medium level jobs were more likely to achieve their aspirations but of those who did not, almost all are working at low level jobs.

The gap between the occupational aspirations of these black high school students and their attainments as young adults holds the potential for frustration. It is not that they are not achieving their "childhood dreams," but, rather, that they are not achieving the goals they said they wanted just four years earlier in high school. Possibly the potential disappointment and frustration is not actually severe because, while they "really" wanted the jobs they said they did, they did not expect to attain them. This possibility was rejected after comparison of the high school occupational *expectations* with adult attainments. Only 17% of those who

Table 1.10. The Occupational Aspirations of Grade School Males by Adult Attainment

Occupational	Level of occupational attainment		
aspirations	Low	Medium	High
		Black males (*n* = 49)	
Low	$\boxed{40.0}$	60.0	-
Medium	37.5	$\boxed{50.0}$	16.3
High	54.8	29.3	$\boxed{16.1}$
		White males (*n* = 85)	
Low	$\boxed{38.5}$	46.1	15.4
Medium	5.3	$\boxed{84.2}$	10.5
High	45.3	37.7	$\boxed{17.0}$

Note. Boxed percentages indicate those who named occupations in identical categories at both time periods.

expected to fill high level jobs are doing so. However, 45% of those who expected to fill medium level jobs are now working at such jobs and another 7% are working at high level jobs. In sum, the odds of black males achieving what they want to or expect to are much higher for those with medium level as opposed to high level goals.

The general pattern of lack of goal attainment among black males was found also for white males. But there were a few differences. As shown in Table 1.10, white males with the highest aspirations at grade school did not more frequently attain them than did their black contempories. Of those who did not, however, somewhat fewer of the high aspiring white males (45.3%) than of the high aspiring black males (54.8%) ended up with low level jobs. It was also found that among white males 84% of those who at grade school level aspired to medium level jobs actually achieved them while an additional 10% were working at high level jobs. For blacks aspiring to medium level jobs at grade school, only half achieved such jobs while 12.5% achieved a higher level position. Although the number of cases is too small to permit definitive conclusions, there is a suggestion that the childhood aspirations of white males are more frequently realized than are those of black males.

The comparison of high school occupational aspirations and adult attainments, as shown in Table 1.11, also indicates that white males somewhat more frequently reach their occupational goals than do black males. Among those with high level aspirations, 18.7% of the whites in contrast to 11.5% of the blacks were working at high level jobs when last interviewed. Somewhat fewer of the whites who did not attain their high level jobs were found working at low level jobs. Among those with medium level

Table 1.11. The Occupational Aspirations of High School Males by Adult Attainment

Occupational aspirations	Level of occupational attainment		
	Low	Medium	High
		Black males (*n* = 54)	
Low	$\boxed{100.0}$	0	0
Medium	53.8	$\boxed{42.3}$	3.8
High	38.5	50.0	$\boxed{11.5}$
		White males (*n* = 103)	
Low	$\boxed{58.3}$	33.3	8.3
Medium	39.5	$\boxed{55.8}$	4.7
High	33.3	47.9	$\boxed{18.7}$

Note. Boxed percentages indicate those who named occupations in identical categories at both time periods.

high school aspirations, more whites (59.5%) than blacks (46.1%) achieved that level or higher.

The high school *expectations* of white males were compared to their job attainments; 16% of those with high level expectations were working at that particular job level. Almost 45% of those with medium level expectations were employed at jobs at that level and another 7% were employed at high level jobs. Expectations generally followed the pattern established with occupational aspirations.

It will require considerable and detailed analyses to attempt to unravel what "went wrong" in the occupational achievement process of the black and white males. Relatively few of those who, as grade school children, aspired to and expected to work at high level jobs have met their goals. What is more, the achievement rate is no better when the aspirations and expectations at high school level are compared to the accomplishments of the young adults. The major exception to the pattern of low goal attainment is that of white males who aspired to or expected medium level jobs. Almost all who had such goals as grade school children are now working at medium level jobs while almost six out of ten who at high school age aspired to medium level positions are now working at such jobs or at a high level job. Black children and youth who aspired to medium level jobs more frequently reached their goals than those who aspired to high level jobs; however, the blacks were not as successful as were the whites.

In an effort to explain the differential degree of goal attainment among the respondents, a score was created by subtracting the score for the occupation at which the respondent was working from the score for the one to which he aspired at a high school age. The new scores, in terms of the Census occupational categories, ranged from 0 for those achieving or going beyond their aspirations to -8 for those whose present job was the maximum number of steps away from the one to which they aspired. Correlation coefficients were then computed between the degree of goal attainment scores and various theoretically important background and other factors.

None of the family background factors related to social class--father's occupation and education, mother's occupation and education--was found to be related to the degree of occupational attainment of the male youth. As a matter of fact, the correlation coefficients were close to zero, as was that between the child's intellectual ability and the degree of goal attainment. Achievement motivation, as measured both at grade and high school, showed a weak but statistically non-significant relationship in the direction of the higher the achievement value, the lower the degree of occupational goal attainment. The confidence of the high school youth in achieving his aspired occupation was measured by a question asking how likely he felt it was that he would get the job he wished. Confidence scores were positively related to goal attainment scores. The correlation coefficient of .22 was significant at the .01 level indicating that the more likely respondents felt they would get the job they wanted, the more frequently they attained their aspirations. The only job-reward factor related to goal attainment was the desire for a job that provided interesting and exciting work. The correlation coefficient was found to be -.19 significant at the .05 level. This indicates that the more the student wanted a job providing interesting and exciting work, the lower was his degree of attaining the job to which he aspired. Finally, the self-image of the young adult was positively associated with occupational goal attainment, with a coefficient of correlation of .21, significant at the .01 level. It may be that goal attainment or its lack produced the self-image, rather than the self-image producing the degree of goal attainment. This interpretation is suggested because self concept, as measured at grade school age, was not associated with occupational achievement.

Preliminary analyses thus have not explained why some males have achieved their occupational ambitions but large numbers have not. It must be recalled that the young adults were about four years beyond high school age when last interviewed. Some will change jobs, some will lose jobs. Some will pursue more training and obtain promotions and some, probably, will be forced to accept demotions if they are to remain employed at all. An unascertainable but probably not large number may yet achieve jobs at the level at which they said, as fifth or sixth graders and juniors and seniors in high school, they wished and expected to be employed.

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FINDINGS

Part 2: Change and Stability in the Occupational Plans of Females

by

William F. Kenkel

The resurgence of the Women's Movement in the United States is often considered to have occurred with the publication of Betty Friedan's The Feminine Mystique in 1963. It was just six years after that date that fifth and sixth grade girls from low-income subcultures in the South were asked about their occupational plans. The major questions that tapped such plans were the same as those to which males responded. The first read, "If you could choose any job you wanted, what kind of job would you really like to have when you grow up?" A second question asked: "What kind of job do you think you really will have when you grow up?" Implied in these questions measuring occupational aspirations and expectations respectively is the idea that the girls would be holding a job in the sense that the term is often used; that is, that they would be working outside the home. It is likely that Friedan's description of the malaise of housewives and their chronic complaints with "the problem that has no name" had not reached fifth and sixth grade girls by 1969, and perhaps had not reached their parents or teachers. To a certain extent, then, the questions asked may have been flawed in that they implied the girl would be working outside the home. It is true, however, that women from low-income groups had a moderately high rate of employment outside the home even in 1969. Also, in a later section, we will report on the responses of the girls to a check list of occupations that did contain the choice "housewife".

The chronology of the occupational plans of girls covered in this section starts with their aspirations and expectations as fifth and sixth graders. Since it is anticipated that the plans of grade schoolers will have an influence on their later plans, an attempt is made to investigate the factors associated with the aspirations and expectations of the fifth and sixth graders. Analyses are then presented on the occupational aspirations and expectations of the girls six years later, when they were, or could be expected to be, juniors or seniors in high school. This is followed by a presentation of the occupational attainments of the young women as determined from interviews in 1979. At this stage, the respondents were 21 or 22 years of age and would have been out of high school three or four years. Their actual job attainments are compared with their aspirations at grade school and high school age. The chapter concludes with two special analyses, one on the tendency of girls and young women to choose "gender appropriate" jobs, the other on the impact of marriage expectations on the occupational goals of girls and women.

Occupational Plans of Grade School Females

The occupational aspirations and expectations of the girls at grade school level were classified according to the 9-point Census categories.

The distributions appear in Table 2.1. Perhaps the most striking finding is the high proportion of girls, 75% of the black and 70% of the white, who aspired to jobs at the professional-technical level. These proportions are considerably higher than those found for the males in this study in which 55% of the black and 42% of the white grade school boys aspired to similar high-level positions.

As noted in Table 2.1 there are differences between the girls' occupational aspirations and expectations, which suggests that the girls were, indeed, able to differentiate between the job they really wanted and the one they expected to hold as an adult. For the professional-technical category, the expectations were lower than the aspirations suggesting a certain realism in the occupational plans of the girls. They knew what they would like but some, at least, did not think they would achieve their goals.

Factors Associated with Occupational Aspirations and Expectations

Table 2.2 shows the factors associated with the grade school occupational aspirations and expectations of girls. These factors are composed

Table 2.1. Occupational Aspirations and Expectations of Grade School Girls, by Race

	Blacks		Whites	
Occupational category	Aspirations (n = 182)	Expectations (n = 171)	Aspirations (n = 271)	Expectations (n = 236)
Professional, technical	75.3	70.8	70.1	60.2
Farmer, farm manager	-	-	-	.4
Manager, official, proprietor	-	-	-	-
Clerical, sales	9.3	11.1	14.8	13.6
Craftsman, foreman	1.1	1.8	.7	.4
Operatives	1.1	1.8	3.7	11.4
Service, private household	12.1	11.7	10.0	12.3
Farm laborer, foreman	-	-	-	-
Laborer	1.1	2.9	.7	.9

Note. Data are in percentages.

Table 2.2. Factors Associated with the Occupational Aspirations and Expectations of Grade School Girls

Factors	Aspirations	Expectations
Background factors		
Father's occupation	-.03	-.04
Mother's occupation	-.09	.15*
Father's education	.01	.05
Mother's education	.07	.06
Parenting factors		
Mother's occupational wishes for girl	.13*	.18*
Mother's occupational expectations for girl	.32*	.32*
Mother's achievement value	.07	.10*
Mother's anomie	-.08	-.11
Mother perceived as loving	.14*	.04
Mother perceived as demanding	.08	.04
Mother perceived as punishing	-.11	-.02
Child's characteristics		
Intellectual ability	.07	.03
Self-concept	.13*	.09
Educational aspirations	.21*	.24*
Educational expectations	.17*	.24*

*Indicates statistical significance at the .05 level or beyond. Other correlation coefficients not statistically significant.

of variables relating to the background factors, parenting behavior, and individual characteristics of the child. (The scales, questions, and the like used to measure the variables are identical to those used for males and are described in the preceding section.) The only significant relationship with a background factor occurred between mother's occupation and girl's occupational expectation. The higher the mother's occupation, the higher the level of the occupation the girl expected to hold.

Mothers were asked both what job they would like their daughter to hold as an adult and what job they expected their daughter to hold. The responses to these questions are considered part of the mother's parenting behavior under the assumption that what the mother wants for the child will affect how she instructs the child, interacts with the child, responds to the child's aspirations, and so forth. The correlation coefficient of .32 between mothers' occupational expectations for girls and the girls' own aspirations and expectations showed the strongest relationship with the girls' occupational plans of any factors measured. It is interesting that mothers' occupational wishes for the child, while statistically significant, were not as highly correlated with girls' aspirations or expectations. This may mean that there was some unrealism contained in the mothers' wishes, but what they expected the girl to do was communicated to the girl and therefore affected her own aspirations and expectations.

Although the correlations were low, two other characteristics of the mothers were found to be related to girls' occupational expectations. The higher the mothers' achievement values and the lower their anomie scores, the higher were the girls' occupational expectations. The relationship of these two characteristics of the mother were in the same direction for girls' occupational aspirations but did not reach the level for statistical significance.

One other characteristic of the mothers was associated with the child's aspirations. The more loving and the less punishing a child perceived her mother to be, as measured by the Bronfrenbrenner Parental Behavior scale, the higher were the girl's occupational aspirations. Loving and punishing parental behavior did not show a statistically significant relationship, however, with girls' occupational expectations.

The results of these analyses indicate that a girl's occupational plans are related to what the mother expects of the girl occupationally, what the mother is like, and how the girl perceives her mother's parenting behavior. Among the characteristics of the girl herself, self-confidence showed a modest relationship with aspirations while intellectual ability showed virtually none at all. The relationships between educational plans and occupational plans showed that the higher the occupational goals, the more education a girl wants and expects to have. This indicates a certain consistency and realism in the girls' goals even at grade school level. The next task is to investigate how, or if, these goals changed from the time the girls were first interviewed as grade school children and when they were of late high school age.

Occupational Plans of High School Girls

Change and stability in the occupational plans of girls are addressed in several ways. First, the occupational aspirations at high school age are presented (Table 2.3). Background, parenting, and personal characteristics are then tested for an association with the high school girls' occupational plans. The differences in percentages of black and white girls choosing occupations that fell in the nine Census categories are then considered. This will reveal the kind of change that has taken place between the two groups of girls. The final analysis consists of determining the proportion of girls who retained their grade school aspirations at high school level and showing the change pattern of those who modified their aspirations.

From the data presented in Table 2.3 on occupational aspirations and expectations, it is clear that occupations falling in the professional-technical categories are the dominant aspirations and expectations of both black and white high school girls. It is also clear that a considerably higher proportion of black than white girls aspired to and expected to fill occupations in the highest category. Expectations are considerably lower than aspirations and the spread between the two is larger than that found at grade school.

Jobs in the clerical-sales category are the second most popular among the high school girls. For jobs at this level and lower, it is noted that generally the proportion expecting to fill the jobs are higher than those

Table 2.3. Occupational Aspirations and Expectations of High School Girls, by Race

Occupational category	Blacks Aspirations (n = 178)	Blacks Expectations (n = 248)	Whites Aspirations (n = 146)	Whites Expectations (n = 182)
Professional, technical	59.55	48.0	43.2	23.6
Farmer, farm manager	-	.4	-	.6
Manager, official, proprietor	3.9	1.2	1.4	1.7
Clerical, sales	23.60	33.1	30.8	28.6
Craftsman, foreman	1.7	2.0	4.1	1.1
Operatives	1.7	2.4	4.8	18.7
Service, private household	8.4	11.3	12.3	11.5
Farm laborer, foreman	-	-	-	-
Laborer	1.1	1.6	3.4	14.3

Note. Data are in percentages.

aspiring to the jobs. This finding and the opposite kind of difference between aspirations and expectations for professional-technical jobs suggest that the girls had subjected their occupational plans to some degree of reality testing. More black girls, for example, expected to hold clerical-sales jobs as adults than really wanted such jobs. More white girls expected to be laborers than wanted to hold this kind of job. Conversely, fewer of both races expected to hold professional-technical positions than would have liked to have held these jobs.

Factors Associated with Occupational Plans

Most of the factors tested for a relationship with elementary school girls' occupational plans were also tested for an association with their occupational plans at high school age. Scores on the Bronfrenbrenner scale, relating to the girls' perceptions of their mothers as loving, demanding, or punishing, were dropped from the high school analysis because they were thought to refer specifically to how the fifth or sixth grade girl perceived her mother at that age.

Mother's educational level was the only variable in the background factors significantly related to the high school girls' occupational aspirations or expectations. In contrast, at grade school age, only mother's occupational status was related to the girls' occupational goals.

Two measures of parenting behavior, mother's occupational wishes and mother's occupational expectations for the girl, were asked of the mothers when the girls were in grade school. The girls' school performance and other evidence may have caused mothers to raise or to lower their wishes and expectations between the time the girl was in elementary school and in high school. Caution is therefore needed when interpreting the association between the mother's wishes and expectations and the girls' occupational aspirations and expectations at high school age. Nevertheless, as shown in Table 2.4, mother's occupational expectations were significantly correlated with the high school girl's own occupational expectations. The correlation with mother's occupational wishes, although in a positive direction, did not reach statistical significance.

Mother's achievement value and mother's anomie are considered to be fairly stable characteristics. That is, it is assumed that they did not change radically during the six years between the time they were first measured and later at high school age when the girl responded about her occupational plans. It was found that the higher the mother's achievement value and the lower her anomie, the higher was the girl's occupational aspirations. As a matter of fact, mothers' achievement and anomie were more strongly related to the girls' aspirations and expectations measured at high school age than they were to girls' aspirations and expectations measured at grade school age.

Of all the variables assessed, the strongest association with high school girls' occupational aspirations and expectations were their educational aspirations and expectations. The correlation coefficients ranged from .34 to .52 for the two measures of expectations and aspirations. This suggests a certain degree of realism in the plans of the high school girls inasmuch as their occupational and educational goals were consistent. Better agreement between desired occupational level and educational level would have resulted, of couse, in even higher correlation coefficients. The moderate level of association reported here may well reflect the lack of knowledge about career alternatives often associated with low-income or rural populations. The girls' educational goals at grade school were also related to their occupational goals at high school age, although the relationship was not as strong as when these aspects of their life plans were tapped at high school age. Self-confidence, another characteristic of the individual, was measured at grade school age, not at high school age. However, high school students were asked how likely they felt it was that they would actually achieve the job to which they aspired. The higher the occupational aspirations, the more likely they felt they would achieve their preferred jobs ($r = .32$). This suggests that confidence in one's ability to get the job one wants taps a more general trait of self-confidence which, in turn, is a desirable trait for higher-level jobs. Mental ability was the only individual characteristic that did not have a significant relationship with either occupational aspirations or expectations.

Changes in Occupational Plans

The differences in the proportions of girls choosing each occupational category at high school as compared with grade school are shown in

Table 2.4. Factors Associated with the Occupational Aspirations and Expectations of High School Girls

Factors	Aspirations	Expectations
Background factors		
Father's occupation	-.09	-.001
Mother's occupation	.08	.10
Father's education	.09	.01
Mother's education	.17*	.12*
Parenting factors		
Mother's occupational wishes for girl	.11	.09
Mother's occupational expectations for girl	.23*	.22*
Mother's achievement value	.11*	-.07
Mother's anomie	-.20*	-.12*
Youth's characteristics		
Mental ability	.02	.08
Educational aspirations, grade school	.5*	.19*
Educational expectations, grade school	.26*	.18*
Educational aspirations, high school	.42*	.38*
Educational expectations, high school	.52*	.34*
Confidence in attaining desired job	.32*	-

*Indicates statistical significance at the .05 level or beyond. Other correlation coefficients not statistically significant.

Table 2.5. The greatest change in occupational plans is found with respect to professional-technical occupations. Both black and white girls reduced their aspirations and expectations with regard to such jobs. The percentage of black girls aspiring to the highest level jobs fell less, about 16 percentage points, while the percentage of white girls fell 27 points. At both grade and high school levels, black girls had higher occupational aspirations than white girls, and as a group, they less frequently lowered their aspirations.

Occupations in the clerical-sales category were named more frequently at high school than at grade school level, probably reflecting a certain degree of reality testing. The two races were not very different with respect to the increase in the proportions aspiring to such jobs; however, black girls showed a greater increase in the number expecting to hold clerical-sales positions.

The final analysis of change and stability in occupational plans was made by constructing cross-tabulations of the occupational level named at

Table 2.5. Differences in Percentages in Occupational Categories for Aspirations and Expectations of Females from 1969 to 1975, by Race

Occupational category	Blacks Aspirations (n = 187)	Blacks Expectations (n = 187)	Whites Aspirations (n = 279)	Whites Expectations (n = 279)
Professional-technical (1)	-15.75	-22.8	-26.9	-19.3
Farmer-farm manager (2)	-	+.4	-	-
Manager, official proprietor (3)	+3.9	+1.2	+1.4	+1.7
Clerical-sales (4)	+14.3	+22.0	+16.0	+15.0
Craftsman-foreman (5)	+.6	+.2	+3.4	+ .7
Operatives (6)	+.6	+.6	+1.1	+7.3
Service, private household (7)	-3.7	-.4	+2.3	-.8
Farm laborer, forman (8)	-	-	-	-
Laborer (9)	-	-1.3	+2.7	+13.4

Note. The numbers represent the differences in the proportions selecting each category between the two time periods.

grade school by the level named at high school age. The analysis thus reveals how many girls were consistent in their occupational choices over the six-year period and which occupational levels were chosen by those who were inconsistent. The occupational levels were created by considering the highest three of the nine Census categories as high level jobs, the next three as medium level, and the lowest three as low level jobs. Data for this analysis consist only of those cases where there is complete occupational information for the three time periods--grade school, high school, and young adulthood. Earlier analyses of occupational choices by Census categories made use of all the cases for which occupational data were available at grade school and high school levels.

Almost 70% of the black and 56% of the white girls aspired to a high level occupation at the two time periods (Table 2.6). Those who changed their aspirations were more likely to choose medium level jobs than low level ones. The relatively small number of girls who originally chose low or even medium level jobs makes it difficult to draw clear conclusions with regard to the girls choosing such jobs. Nevertheless, there are some

Table 2.6. A Comparison of the Percentages of Females Naming Occupational Aspirations at Grade and High School Levels

Occupational level, grade school	Occupational level, high school		
	Low	Medium	High
		Black females (_n_ = 71)	
Low	$\boxed{81.8}$	18.2	-
Medium	50.0	$\boxed{37.5}$	12.5
High	7.7	23.1	$\boxed{69.2}$
		White females (_n_ = 160)	
Low	$\boxed{50.0}$	37.5	12.5
Medium	10.3	$\boxed{41.4}$	48.3
High	12.1	32.2	$\boxed{55.7}$

Note. Levels constructed by considering highest three census categories "high", middle three "medium", and lowest three "low". Boxed percentages indicate those who named occupations in identical categories at both time periods.

interesting patterns. The highest proportion of those naming a low level job at high school age were those who earlier had named such jobs as the ones to which they aspired. Conversely, the lowest proportion of high school girls naming a high level position were those who at the grade school level named a low level job.

There is good evidence, then, that the occupational aspirations of high school girls are related to their grade school aspirations. The bulk of the girls named occupations at the same level at both time periods. Of those who did not, girls who originally aspired high were not likely to drop to the lowest occupational level and those who originally aspired to the lowest level jobs were not likely to change their aspirations to the highest level job.

Changes in occupational expectations showed a different pattern than that of aspirations. As shown in Table 2.7, white girls were not nearly as consistent over the six-year period with regard to their occupational expectations of a high level job. Only 36% named a high level job as the one they expected to hold at both time periods. While the bulk of those who changed named a medium level position, almost 20% of those originally expecting to fill a high level job now expect to fill a low level one. Black girls, however, were not as likely to reduce their expectations for a high level position. A high-consistent type for both races were those who named a medium level job at both time periods. Those originally naming medium level jobs as their desired occupation did not show the same degree of consistency as was found with expectations. This indicates, once

Table 2.7. A Comparison of the Percentages of Females Naming Occupational Expectations at Grade and High School Levels

Occupational level, grade school	Occupational level, high school		
	Low	Medium	High
		Black females (n = 71)	
Low	$\boxed{33.3}$	33.3	33.3
Medium	25.0	$\boxed{62.5}$	12.5
High	11.9	23.8	$\boxed{64.3}$
		White females (n = 160)	
Low	$\boxed{35.7}$	21.4	42.9
Medium	19.3	$\boxed{64.5}$	16.1
High	19.4	44.8	$\boxed{35.8}$

Note. Levels constructed by considering highest three census categories "high," middle three "medium," and lowest three "low." Boxed percentages indicate those who named occupations in identical categories at both time periods.

again, that the respondents apparently were able to conceptualize the difference between a job they wanted and the job they expected to hold. The next task is to investigate the jobs these respondents have actually achieved as young adults.

Occupational Attainment of the Young Adults

The third interview with the respondents was conducted in 1979, ten years after they were interviewed as grade school children and four years after the second interview. The respondents were mostly 21 or 22 years of age at the third interview and were thus three or four years beyond the usual age at high school graduation. What were they doing, occupationally, and how did their achievements relate to their earlier plans? This question is addressed in several ways. First, the percent of the young women who were employed and the description of the proportion whose jobs fall within each of the nine Census categories are given. Next, the Census categories are collapsed into three prestige levels to compare, on an aggregate basis, the grade school and high school occupational plans with adult attainment. The third analysis also uses the three occupational prestige levels but in this case cross-tabulations are used to compare the original grade school aspirations with adult attainments.

Despite the large numbers of girls who aspired to professional-technical occupations, only about 6% of the white and 7% of the black

Table 2.8. The Occupational Attainment of Presently Employed Young Adult Females

Occupational Category	Black females		White females	
	n	%	n	%
Professional-technical (1)	3	6.8	7	6.3
Farmer-farm manager (2)	-	-	-	-
Manager, official proprietor (3)	-	-	2	1.8
Clerical-sales (4)	16	36.6	44	39.3
Craftsman-foreman (5)	3	6.8	5	4.5
Operatives (6)	6	13.6	22	19.6
Service, private household (7)	12	27.3	11	9.8
Farm laborer, foreman (8)	-	-	1	.9
Laborer (9)	4	9.1	20	17.9

girls, as shown in Table 2.8, were actually working at such jobs as young adults. Some young women, now in school or working at less prestigious jobs, may eventually work at the professional-technical level, but it does not seem likely that the proportion so employed will increase greatly. (Only three black females and six white females who aspired to a professional-technical position were in graduate school or college at the time of the interviews with the young adults.) The largest proportion of both black and white young women were working at clerical-sales types of jobs. For blacks, the next most popular jobs were service and private household ones followed by operative work in a factory. For whites, operative work was the second most popular type of job, but it was followed very closely by jobs classified as laborer. The actual occupational attainments of young adult women were far removed from their plans at earlier ages.

Another way of viewing the difference between aspirations and attainments is to compare the proportions choosing jobs at a given prestige level with the proportion actually employed in a job at that level. Over ten times as many black girls aspired to and expected jobs categorized as professional-technical in grade school as were actually working at such jobs as young adults (Table 2.9). The comparisons with high school plans are also striking. Just four years before the last interview, over nine times as many black girls aspired to professional-technical occupations as actually had achieved them; over six times as many black girls expected to fill such occupations as managed to do so. Conversely, many more are

Table 2.9. Percent Females Naming Occupational Level at Grade and High School and Adult Attainment

Occupational level	Grade school		High school		Adult attainment
	Aspirations	Expectations	Aspirations	Expectations	
			Black females		
Low	13.1	14.6	9.5	15.8	36.3
Medium	11.5	14.6	27.0	39.7	57.0
High	75.3	70.8	63.5	44.5	6.8
			White females		
Low	10.7	13.1	12.9	25.8	28.6
Medium	19.2	25.4	37.5	48.4	63.4
High	70.1	61.4	49.6	25.8	8.1

filling jobs at a medium level than those who aspired to or expected such jobs. The proportion of black girls aspiring to low level jobs dropped from 13% to 9.5% between grade and high school; yet four years after high school 36% of the employed black young women were working at low level occupations.

The general picture of a great divergence between the aspirations of children and youth and the attainments of adults is found for whites as well as blacks. Almost nine times as many whites aspired to high level jobs at grade school as were working at that level. The white girls reduced their aspirations and expectations considerably between grade and high school. Thus, only 26% of the white girls expected, at high school age, to work at the professional-technical level. Only 8% were actually working at such jobs. By high school age, the proportion expecting to work at jobs at the lowest level had increased to almost 26%, and 29% were actually working at this level.

There are some interesting differences between the races shown by the data in Table 2.9. More whites than blacks expected, at high school level, to be employed at low level jobs, but more blacks were actually holding such jobs. Conversely, at both grade school and high school more blacks than whites aspired to high level positions and more blacks, by a considerable margin, actually expected to fill such jobs. Yet, white females were somewhat more likely to be filling high level positions as young adults. In other words, despite their higher aspirations, black females were more likely to have attained low level positions and less likely to have attained high level positions than were their lower-aspiring white counterparts.

Table 2.10 consists of a cross-tabulation of the occupational aspirations of girls at grade school by their own adult attainments. Thus shown is the percentage of all girls who aspired to high level occupations that actually achieved such positions, the percentage of those who aspired to high level occupations that have achieved medium level ones, and so on. Because of the few respondents who originally aspired to low or medium level occupations, particular attention should be given to those who also initially aspired to high level jobs.

The data in Table 2.10 also shows that only about 10% of black and white girls who in grade school aspired to high level occupations had actually achieved them. The rest had mostly achieved medium level jobs but a fairly large proportion of the high aspiring girls were working at the lowest level jobs. Somewhat more of the black high-aspiring girls achieved only low level positions when compared to the white girls.

High school occupational aspirations and adult attainment were also cross tabulated, as shown in Table 2.11. Only a small number, 9% of the black and 11% of the white girls, who at high school age aspired to high level occupations were actually working at such levels. Over a third of the black young women and almost a third of the white women who in 1975 aspired to high level occupations were, in 1979, working at the lowest level jobs.

It might be asssumed that girls' occupational expectations at high school age would be closely related to the jobs they attained as young adults. The measures were made only four years apart and the question

Table 2.10. The Occupational Aspirations of Grade School Females by Adult Attainment

Grade school occupational aspirations	Level of occupational attainment			Total at grade school	
	Low	Medium	High	*n*	%
		Black females (*n* = 43)			
Low	$\boxed{0.0}$	71.4	28.6	7	16.2
Medium	50.0	$\boxed{50.0}$	-	6	14.0
High	33.3	56.7	$\boxed{10.0}$	30	69.8
		White females (*n* = 118)			
Low	$\boxed{40.0}$	50.0	10.0	10	8.5
Medium	34.8	$\boxed{65.2}$	-	23	19.5
High	30.6	58.8	$\boxed{10.6}$	85	70.3

Note. Boxed percentages indicate proportion of those who expected a specific level and achieved that level.

Table 2.11. The Occupational Aspirations of High School Females by Adult Attainment

High school occupational aspirations	Level of occupational attainment			Total at high school	
	Low	Medium	High	n	%
		Black females (n = 44)			
Low	$\boxed{100}$	-	-	2	4.5
Medium	25.0	$\boxed{75.0}$	-	8	18.2
High	35.3	55.9	$\boxed{8.8}$	34	77.2
		White females (n = 111)			
Low	$\boxed{33.3}$	55.6	11.1	9	8.3
Medium	23.1	$\boxed{74.4}$	2.6	39	34.8
High	31.3	57.8	$\boxed{10.9}$	64	57.1

Note. Boxed percentages indicate proportion of those who expected a specific level and achieved that level.

concerning expectations asked what occupation they really expected to achieve. As shown in Table 2.12, white girls were more likely to achieve their expectations than were black girls; but for both races, the comparison of expectations to attainments suggests a considerable amount of disappointment. Fewer than 10% of the black and 25% of the white girls who at high school age expected to obtain high level occupations were actually working at such jobs. For both races, but particularly for blacks, girls with high expectations were more likely to be working at low level jobs than at the high level jobs they had expected.

Why were there so many discrepancies between the occupational plans of girls and the jobs at which they were working as young women? In order to answer this question, a measure of the difference between high school aspirations and adult attainments was created by subtracting the value representing the prestige level of the adult's occupation from that representing the level of the high school girl's aspiration. Difference scores ranged from 0 to minus 8. Correlation coefficients were then computed between the difference score and background factors and various occupationally related variables. A positive correlation shows that the higher the value of the independent variable, the higher the degree of attainment of occupational aspirations.

The only family background factor found to be associated with the degree of attaining occupational aspirations was mother's education, with a correlation coefficient of .23. That is, the higher the mother's education, the greater the concordance between the girl's occupational aspirations and attainments. Father's education and occupation showed a relationship in the same direction but the coefficients were not statistically

Table 2.12. The Occupational Expectations of High School Females by Adult Attainment

High school occupational expectations	Level of occupational attainment			Total at high school	
	Low	Medium	High	n	%
		Black females (n = 38)			
Low	$\boxed{50.0}$	50.0	-	4	.5
Medium	30.8	$\boxed{69.2}$	-	13	34.2
High	38.1	52.3	$\boxed{9.5}$	21	55.3
		White females (n = 94)			
Low	$\boxed{26.3}$	68.4	5.3	19	20.2
Medium	27.7	$\boxed{68.1}$	4.3	47	50.0
High	28.6	46.4	$\boxed{25.0}$	28	29.8

Note. Boxed percentages indicate proportion of those who expected a specific level and achieved that level.

significant. Two characteristics of the girl herself were related to attaining occupational aspirations. One was the degree of confidence expressed regarding the likelihood that she would obtain the kind of job she wanted. The higher the degree of confidence, the greater the concordance between the job she said, at high school, she would like to have and the one she was holding as an adult (r = .18). Wanting a job that would allow her to help other people was negatively associated with degree of attaining the job to which one aspired (r = -.24).

The theoretically important factors found not to be associated with attaining occupational aspirations need to be reported. Among these were mental ability, achievement motivation as measured at grade and at high school, self-image as measured at adulthood, the perception of barriers to achieving one's chosen occupation, and how long the girl had thought about the occupation she listed as the one to which she aspired. Further analyses may uncover some explanations for the differences among respondents in the degree to which they achieved their chosen occupation.

Restricted and Gender-Appropriate Occupational Choices

Another feature in the occupational choice pattern of the low-income females that requires investigation is their tendency to choose occupations from a relatively restricted range of occupations. Analysis of the occupational choices of the young women in the sample revealed two basic trends: (a) they aspired to occupations that are usually considered feminine occupations, and (b) they aspired to occupations within a narrow range of all occupations (Kenkel, 1982). Each of these points will be discussed further and explanations for the tendency to choose gender-typed occupations will be explored.

The occupational aspirations of girls were measured both at grade school and high school age by a free-response question concerning what occupation they would really like to have as an adult. The occupations were coded as "traditionally feminine", "traditionally masculine," or "gender neutral" with all occupations in which, according to Census figures, 60% or more of the employees are of one sex being considered masculine or feminine, respectively. All other occupations were designated gender neutral. A panel of judges was used to determine the gender-typing, if any, of any ambiguous cases.

The data in Table 2.13 provide strong evidence that the females in this sample aspired to occupations that traditionally have been considered feminine ones. At grade school level, 92% of their occupational preferences were for jobs classified as feminine; at high school level, 78% of the choices were for feminine jobs and another 13% were for jobs that were gender neutral.

The jobs to which girls and young women aspired clearly fall within a narrow and restricted range. At grade school level, 77% of their occupational preferences were restricted to four jobs: teacher, nurse, secretary, and beautician (Table 2.14). At high school age, these four jobs, plus social worker, accounted for 57% of their choices. There is further evidence of restricted occupational choice among females. Respondents were given a list of 19 occupations and asked to indicate which ones they would consider in addition to the one to which they aspired. Males checked an average of 2.6 occupations. Without considering the choice "housewife only", females checked an average of 1.9 occupations; when the choice of "housewife only" was considered, females checked an average of 2.1 occupations.

Returning to Table 2.14, it is interesting to compare the popularity of different specific occupations as judged by the females who chose them in grade school versus high school. The proportion naming teacher dropped considerably. There also was a sizeable drop in the proportion citing nurse as their occupational choice and a noticeable increase in the proportion naming secretary. In other words, many females did change their

Table 2.13. Longitudinal Occupational Aspirations of Females by Gender-Type of Occupation

Type of occupation	Percent aspiring at elementary level (_n_ = 538)	Percent aspiring at high school level (_n_ = 447)
Feminine	91.6	78.3
Neutral	5.6	12.8
Masculine	2.3	8.9

Table 2.14. Modal Occupational Choices of Females at Elementary and High School Levels

Occupation	Percent elementary level (n = 538)	Percent high school level (n = 447)
Teacher	38.9	7.2
Nurse	23.6	18.6
Secretary	10.2	22.9
Beautician	4.3	2.4
Social worker	0.0	5.9
Other	22.0	43.0

occupational choices between grade school and high school, but they often shifted from one to another of the four or five occupations most frequently named. Other analyses show that between grade and high school the choices of 71% of the female respondents remained in the feminine category, 7% changed from a gender neutral or masculine occupation to a feminine one, 20% changed from a feminine to masculine or neutral occupation, and the choices of 2.5% remained in the gender neutral or masculine category. Here again is evidence that the females changed their occupational choices but only slightly more away from generally feminine occupations as towards them.

Explanations for Gender-Typed Occupational Choices

Why did the low-income girls in the sample choose "gender appropriate" jobs when in grade school and basically choose the same types of jobs when nearing high school graduation? It is important to explore this issue because the better the reasons are understood, the more will be the potential success for helping young women to choose non-traditional jobs and to expand the range of occupations from which they choose.

Various features of the rural subculture have been identified as affecting the career choices of rural youth. The restricted range of role models (Cosby & Charner, 1978; Lipset & Bendix, 1959) in most rural areas could serve to limit the occupational choices of rural women. This may be particularly relevant in the present sample of low-income young women. Whether rural or urban, they probably are not exposed to a wide range of female role models in occupational careers. In this sample, about half of the mothers of the respondents worked outside the home and, of these, most were employed as service workers or in other low-prestige occupations. If the daughters have higher aspirations, as they do, they are faced with choosing jobs that are not being modeled by their mothers, the mothers of their friends, or even women within their own subculture.

The unique nature of women's occupational roles cannot be ignored. The division of labor by sex still generally results in women having primary responsibility for home management and child care (Marini, 1978). As others have noted (Bahr, 1974; Lipman-Blumen, 1972; Poloma & Garland, 1971; Feldman & Feldman, 1974; Flora & Johnson, 1978), when planning an occupational role women expect to add labor force participation to home management and child care activities. The anticipation of a dual role may suggest to women that they choose an occupation that is compatible with domestic and child care duties. Perhaps women perceive that teaching, nursing, and secretarial work have high turnover rates and would allow them to move in and out of the job market in keeping with their family responsibilities. It is also true that the dual role of women is a demanding one. The anticipation of negative consequences of a dual role assumes that most women do, indeed, expect to marry and have children, both of which assumptions are true for the women in this study. Another approach to explaining the limited range of women's occupational choices and the high proportion preferring "gender appropriate" jobs is to explore the occupational orientation of young women. A comparison group is needed and the most obvious one is the young men in the same study. The fundamental question is whether the young women are as prepared as the young men to enter the world of work. There are a number of indices available in the present study to help answer this question. As shown in Table 2.15 these include anticipation of working, academic aspirations and success, achievement motivation, work experience, willingness to move from home community, the rewards sought in an occupational role, perceived barriers to getting the jobs one wants, source of knowledge of jobs and careers, and encouragement received from parents.

When the two groups are compared, there is some indication that the young women are not as committed to an occupational role as are the young men. In response to a question concerning jobs they would consider other than the one they preferred, 24% of the women checked "housewife only". These cases are in addition to the 12% who in response to the question, "If you could choose any job you wanted, what kind of job would you really like to have in the future?" wrote "housewife". Since there was no comparable position that males could indicate, the only safe conclusion is that a sizeable number of young women would consider not having an out-of-the-home occupation. There is additional evidence that young women may not be fully committed to an occupational role. At least this can be inferred from the differences found between the sexes with regard to whom they had talked about a job. Males were almost as likely as females to have talked to their mothers but considerably more likely than females to have talked to their fathers. Females were somewhat less likely than males to have talked about jobs with other referent persons beyond their immediate family or other relatives. If talking with others about one's future job is an indication of the salience of an occupational role in one's life, then males may attach more salience to an occupation than do females, particularly regarding the use of their father as a resource person.

Females were more likely to say that their sex and lack of money for college would keep them from getting the job they wanted, probably due to the fact that they had higher educational aspirations than males. With regard to academic and attitudinal barriers to occupational success, females may have an advantage, for they scored higher in academic motivation, achievement motivation, and they reported a higher grade point average. In

Table 2.15. Male-Female Differences in Factors Related to Occupational Aspirations

Variable			Significance of difference level (t-test)	Direction of difference
	Percents			
	Male	Females		
Want or would consider housewife only	—	36.0	—	——
Talked to mother about job	60.2	64.4	n.s.	Females slightly more
Talked to father about job	51.0	33.5	.001	Males significantly more
Talked to older sibling about job	37.1	31.8	n.s.	Males slightly more
Talked to other relative about job	32.5	30.5	n.s.	Males slightly more
Talked to no one about job	7.3	9.2	n.s.	Females slightly more
Learned about job at school	30.2	39.3	.001	Females significantly more likely
Learned about job from family	28.3	23.2	n.s.	Males slightly more likely
	Mean scores			
	Male	Female		
Average number of acceptable occupations	2.58	1.94	.001	Males significantly named more
Attitude toward working women	2.89	3.04	.05	Females significantly more accepting
Extent thought about future job	2.44	2.49	n.s.	Females slightly more
Certainty of getting job choice	2.1	2.0	n.s.	Males slightly more
Necessity to move as barrier to job choice	1.54	1.62	n.s.	Females slightly agree more
Sex a barrier to job choice	1.13	1.20	.05	Females significantly higher
Lack of money for college as barrier to job choice	1.78	1.89	.05	Females significantly agree more
Academic motivation	2.55	2.79	.001	Females significantly higher
Achievement motivation	1.16	1.34	.01	Females significantly higher
High school grade this year	2.38	2.83	.001	Females significantly higher
Frequency of mother talking to child about job	1.71	1.74	n.s.	Slightly higher for females
Frequency of mother talking to child about education	2.46	2.40	n.s.	Slightly higher for males
Mother's educational aspirations for child	5.99	5.97	n.s.	Slightly higher for males
Mother's occupational aspirations for child	6.01	6.86	.001	Significantly higher for females
Mother's certainty that child would achieve preferred occupation	1.94	2.20	.05	Significantly higher for females

(table continues)

Variable	Mean scores: Male	Mean scores: Female	Significance of difference level (t-test)	Direction of difference
Youth with no part-time summer employment	1.09	1.26	.001	Females significantly more likely
Job aspiration	6.23	7.17	.001	Females significantly higher
Job expectation	5.24	5.94	.001	Females significantly higher
Important as job features:				
money	2.39	2.20	.001	Males significantly higher
steady employment	2.55	2.38	.001	Males significantly higher
chance to be own boss	2.08	1.61	.001	Males significantly higher
chance for helping others	2.31	2.54	.001	Females significantly higher
chance for interesting work	2.43	2.49	n.s.	Females slightly higher

Note. All *t*-tests computed from means of variables.

addition females reported higher job aspirations and expectations than males.

Past research generally has reported a positive relationship between the encouragement given to children by their parents and the children's educational and occupational aspirations (Wilson & Portes, 1975; Hout & Morgan, 1975; Kerckhoff, 1974; Marini, 1974; Kandel & Lesser, 1972; Alexander et al., 1975; Hauser, 1972). There is some indication from past research that boys receive more parental encouragement than girls and that it is more effective for boys than girls (Boocock, 1972; Marini, 1974; Hauser, 1971; Hout & Morgan, 1975). There is little evidence in the present study, however, that the sexes differed with regard to the encouragement they received from parents. Mothers were reported as talking to sons and daughters about equally with regard to a future job. In addition, mothers had similar educational aspirations for sons and daughters, but they had considerably higher occupational aspirations for daughters than for sons. If anything, mothers were a little less certain that sons would get the job their mothers would like to see them have than they were about daughters.

The most important differences between the sexes were job experience and the kinds of rewards sought from an occupational role. Only 9% of the males, but 25% of the females, had had no part-time or summer employment. Males were more likely to stress extrinsic features of a job by indicating that such things as a chance to make money, steady employment, and an opportunity to be one's own boss were important job considerations. Females stressed intrinsic features particularly the opportunity for helping other people.

In earlier analyses it was encouraging to discover that there were considerable changes in the aspirations of these low-income girls between grade school and high school years. To be sure, at high school age they still greatly preferred "gender-appropriate" jobs and their choices covered a rather limited range of occupations. Yet, they did change with respect to the specific job that they would really like to have. This suggests that in the six-year interim they acquired some new information about jobs, reassessed their true wishes, reached different conclusions on their abilities and interests, reevaluated their resources for continuing education, and the like. During this period of their lives they would therefore seem to be receptive to information and assistance that would allow them to understand the many opportunities for meaningful, satisfying, and rewarding occupational roles that are available to them. The information provided through this special analysis, particularly the findings with regard to the rewards young women seek in an occupation, the lack of role models for low-income young women in the higher occupational ranks, the relative lack of part-time and summer work experience among young women and their higher levels of academic and achievement motivation, should be of benefit to counselors and teachers as they assist young women with their occupational plans.

Unlike most males, the occupational plans of females somehow need to be coordinated with their marriage plans. In an effort to further explain the occupational goals of females, a special analysis was conducted on the relationship between their occupational and marital plans at high school age (Kenkel, 1980).

Effects of Marriage Plans on the Occupational Plans

Statistically speaking, almost all young women approaching adulthood can expect to work outside the home, over 90% will marry, and over 80% will have at least one child. To marry or to work are not mutually exclusive goals. But there are a number of ways a woman can fit work, marriage, and motherhood into her life plans. She can work until marriage or the birth of a child and then never again. She can work most of her adult life, combining an occupational career, marriage and motherhood. She can work until the birth of children and then not again until the youngest is either in school or grown. An important difference in these life plans is the degree of saliency of an occupational role; how significant is the pursuit of an occupational career in a girl's life plans.

Insights into the occupational choices of late adolescent girls can be obtained by investigating the relationship between their age at marriage plans and the saliency they attach to an occupational role. Special analyses were conducted to test this relationship with the general hypothesis: Among low-income high school girls, the lower the salience of an occupational role, the higher will be the salience of the wife-homemaker role and, therefore, the younger will be the expected age at marriage. Low occupational saliency is conceptualized as: aspiration for less prestigious jobs, lack of seriousness of occupational plans, poor job knowledge, perception of unfavorable reward-cost balance in an occupational role, and perception of favorable reward-cost balance in the wife-homemaker role. Operational definitions of the occupational saliency factors are given as each factor, in turn, is discussed. Analyses on occupational saliency and age at marriage are restricted to unmarried, in-school girls. Responses to the question on expected age at marriage were categorized as 19 or younger, 20 to 21, 22 to 23 years of age, and 24 years of age and older. The categories correspond to "expecting to marry shortly after high school graduation or younger", "two or three years after high school graduation", "after the time necessary to complete college", and "a couple of years beyond the time necessary to complete college".

As shown in Table 2.16, black and white girls differed significantly regarding the age at which they expected to be married. The results are consistent with those of Kuvlesky and Obordo (1972) and Drabick (1972). In the present study, the differences between the races are striking. Since the girls attended the same types of schools in purposively selected poverty areas, subcultural differences other than race would not seem to be responsible for the differences between the groups. In light of the differences, it was decided to control on race when analyzing the relationship between occupational saliency and age at marriage plans.

Table 2.16. Expected Age at Marriage of Black and White Girls

	Blacks		Whites	
Expected age at marriage	Number	Percent	Number	Percent
19 years and younger	17	12.6	73	41.5
20-21 years	35	25.9	54	30.7
22-23 years	25	18.5	17	9.7
24 years and older	58	43.0	32	18.2
Totals	135	100.0	176	100.0

$X^2(3, \underline{n} = 311) = 43.3, \underline{p} < .001$

Level of Occupational Aspirations-Expectations

Even though it is possible to plan to marry young and simultaneously aspire to a high-level occupation, it is hypothesized that the higher the prestige of the occupation to which a girl aspires, the older will be the age at which she expects to marry. An item on the questionnaire asked what kind of job the respondent would really like to have in the future. The score on Duncan's Socioeconomic Index is used as the indicator of occupational prestige (Reiss, 1961).

For both black and white girls, it was found that the higher the mean occupational score, the later was the age of expected marriage. The mean occupational scores for girls who planned to marry in their teens was found to be 70, for those planning marriage at ages 20 or 21, the score was 71, while for girls who planned to postpone marriage until age 22, 23, or 24 or older the mean score was 73. The variation in these mean scores approaches significance as tested by analysis of variance ($\underline{F} = 2.2$, $\underline{p} < .08$). When black and white girls were analyzed separately, the pattern of the means was the same in both subgroups as in the group of all girls. Analysis of variance tests for the subgroup means showed that the variations in the means for the white subgroup approached significance (F = 3.3, p <.06) but were not significant for the black subgroup.

Girls were asked what occupation they actually expected to have in the future. The Duncan scale used to code preferred occupation was also used to code expected occupational choice. For all girls and for black and white girls separately, the means were considerably lower for expected than preferred occupations. Analysis of variance tests showed that the variations in the means for the total group and for the white subgroup were significant at least at the .05 level (F = 3.1 and F = 2.8 respectively). For the black subgroup, the variation in the means was not significant. As shown in Table 2.17, the higher the mean level of prestige of the expected occupation, the older the girl expected to be when she married.

Table 2.17. Occupational Aspirations and Expected Age at Marriage of High School Girls

	Mean occupational prestige score					
	Desired occupation			Expected occupation		
Expected age at marriage	Black girls	White girls	All girls	Black girls	White girls	All girls
19 years and younger	69	63	64	57	43	47
20-21 years	69	67	68	51	52	51
22-23 years	73	68	69	56	58	57
24 years and older	70	71	72	64	64	64

Seriousness of Occupational Plans

Among the girls who list a given job as the one they prefer, some have thought about it for a while, have talked with others about it, and have at least a mental strategy for achieving their goal. Others have given less thought to the matter. Perhaps they will state an occupational choice but, all-in-all, planning for a future job is not a salient factor in their lives. This difference among girls is conceptualized as the seriousness of occupational plans. It is hypothesized that the less serious their occupational plans, the younger will be their expected age at marriage.

An item on the questionnaire asked "Have you ever thought about what kind of job you might have in the future?" Possible responses were "yes, a lot", "yes, a little", and "no" scored from one to three respectively. The older the expected age at marriage, the less frequently the girls responded that they had not thought about a future job and the more frequently they said that they had thought a lot about it. As for a relationship between the two variables, the Pearson correlation of .16 for black girls is significant at the .05 level; but the correlation was not significant for white girls.

Another item on the questionnaire asked how long ago the respondent had thought that she would really like to have the kind of job she named. Possible responses were "since I was a child", "for several years", "only recently", and "I have not really thought about it much before today", coded one to four respectively.

Seven girls gave the last response, suggesting that they thought about a job only for the purpose of answering the question. All seven expected to marry in their teens. Not many girls had thought about their job choice since childhood but among both black and white girls more of those who expected to delay marriage gave this response. There was no pattern for the other response categories.

Occupational Knowledge

A dimension related to seriousness of occupational plans is that which has been conceptualized as occupational knowledge. It has to do with knowledge about the kind of work required in an occupation, the educational or other prerequisites for the job, the rewards from the job, the strategy for obtaining the job, and the like. It is reasoned that those who have considerable knowledge of this sort regarding a desired occupation are more likely to actually achieve the occupation than those who say they want a certain job but do not know much about it. A successful occupational career requires a certain amount of planning, and planning requires knowledge. Women who are content to work from time to time do not need the same kind of occupational knowledge as do those who seek a career. Perhaps, girls with meager occupational knowledge see fewer options to getting married young than those with good knowledge of the world of work. It was therefore hypothesized that girls with poorer occupational knowledge would expect to marry at younger ages.

One way in which occupational knowledge is measured in the present study is through an item which asks the respondents how far one has to go in school to get the kind of job they named as the one they really wanted. Six educational choices were furnished, ranging from finishing eighth grade to going beyond college to a graduate or professional school. The response "don't know" was also offered. Respondents were classified as those who specified an educational requirement and those who replied that they did not know the requirement.

Even though most girls stated some educational requirement, there was a significant relationship among black girls between expected age at marriage and whether or not they stated an educational requirement for their preferred occupations ($r = .26$). A similar pattern existed among white girls; the older they expected to be when they married, the more likely they were to specify an educational requirement for their desired occupation. This tends to support the general hypothesis that girls who expect to delay marriage have better occupational knowledge than those who want to marry soon after high school graduation. It also suggests that a more complete measure of occupational knowledge would discover an even stronger relationship.

Perceived Rewards and Costs in an Occupational Role

It is assumed that in deciding whether or not to work and what kind of work she wants to do, a girl will mentally consider the rewards and costs of the various options. Girls who plan to embrace fully an occupational role would see a favorable reward-cost balance in pursuing an occupation. Presumably they would therefore be willing to delay marriage in order to reach their occupational goal. On the other hand, girls who see few rewards and many costs in working would not be highly motivated to seek a job. Although they may state a job preference, they may also plan to marry young, either aware or unaware that marriage may keep them from getting the job they say they want.

The perceived rewards in working at a specific job are measured by an item which asked: "In picking the job you would most like to have, how important are the following things about that job?" The features listed were: "offers a chance to make a lot of money", "gives a chance to become an important person", "offers a chance for exciting and interesting work", "gives steady employment", "gives a chance to help other people", "gives a chance to be one's own boss", and "something other than the foregoing". The respondent was asked to reply whether each of the seven features was "not very important", "important", or "extremely important".

Two occupational rewards, the chance for exciting and interesting work and the chance for helping other people were found to be related to expected age at marriage. Fifty-eight percent of the black girls and 47% of the white girls stated that the chance for exciting and interesting work was an important feature of their job choice. For both races the correlation coefficients were low (.10 and .19 respectively), but only for the white group was the value significant at the .05 level. Thus, white girls who attach importance to this job feature are more likely than others to expect to postpone marriage.

About 62% of the black and 52% of the white girls said that an extremely important feature of the job that they preferred was that it gave them a chance to help other people. None of the white girls who planned to marry at age 24 or later considered that the opportunity to help others was a "not very important" job feature and only one black girl planning marriage at that age gave the "not very important" response. The correlation coefficients between the intensity of importance attached to this job feature and expected age at marriage were not significant.

Perceived Rewards and Costs of Homemaker Only Role

Despite the large and increasing number of women in the labor force, women can still consider the option of not working outside the home. In his analysis of data from the 1970 National Fertility Study, Bumpass discovered that from 19% to 30% of the married women, depending on their age, intended to remain out of the labor force (1978). It is therefore reasonable to expect that in formulating their life plans some unmarried girls will see their adult roles primarily as those of wife, mother, and homemaker. Presumably they perceive a favorable reward-cost balance in these roles and find them more acceptable than a career outside the home instead of, or in combination with, marriage. It is reasoned that the perceived desirability of the wife-mother only role will be inversely related to age at marriage expectations. It would seem that girls who place a high value on this role want to start enacting it as soon as possible or, in other words, would want to marry while young. Then, too, such girls would not be planning an occupational career and there would be no real need to postpone marriage.

It was found that the very few girls who gave the free response of "housewife" when asked what kind of job they expected to hold planned to marry early. Respondents were also asked to check any of 20 jobs on a list that they had recently been thinking about for themselves. Checking "housewife only" was significantly related to youthful marriage plans for white girls and approached significance for black girls. Responses to a scale measuring attitude toward women working outside the home showed a statistically significant relationship with age at marriage plans for black and white girls, that is, the more accepting the position on married women working outside the home, the later the expected age at marriage. Taken together, these measures indicate support for the hypothesis that the greater the perceived rewards in the homemaker role, the younger will be the expected age at marriage.

The hypotheses tested in this analysis give mild support to the general hypothesis that among low-income girls the lower the saliency of an occupational role, the earlier the expected age at marriage. At a more general level, the analyses show that the occupational plans of female youth can better be understood if they are seen in the context of other aspects of her life plans, specifically her marriage plans.

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FINDINGS

Part 3: Educational Aspirations and Expectations of Low-Income Youth

by

Lawrence B. Schiamberg

The purpose of this part of the chapter is to analyze the educational plans of children and youth. The educational aspirations and expectations of the same children in fifth or sixth grade, in high school and their later attainments as young adults will be the focus. The primary focus of analysis in this longitudinal approach will be the stability or change in aspirations and expectations over time. Another important analysis will be the examination of differential aspirations and expectations by sex. This latter assessment is important because of the changing nature of sex roles in our society.

The Educational Plans of Grade School Children

The educational plans of grade school children were measured by two questions. "How far would you like to go in school?" measured educational aspirations. "How far do you think you will really go in school?" measured educational expectations.

Table 3.1 presents the educational aspirations and expectations of all grade school children separated by sex and race. There were several points worth noting that differentiate expectations and aspirations as early as the fifth grade. Children's aspirations for finishing college were much higher than their expectations for finishing college. This trend was found for boys and girls as well as for blacks and whites. This result suggested an emerging conceptualization of reality that distinguishes between what one wishes to do and what one expects to do. This differential assessment by children at the elementary school level can be viewed positively, i.e., they have realistic expectations, or negatively, i.e., young children have already learned to lower their expectations.

Another important result is indicated by the relatively high percentages of children who had high aspirations and expectations regarding school attainment, (i.e., 70% of black females aspired to finish college, 45% expected to finish college; percentages for white females were 59% and 36% respectively). The results also indicated higher goals for blacks as opposed to whites. Black females appeared to be the most optimistic. Such optimistic attitudes discovered at grade school age became tainted by reality during high school. This was true for blacks and whites, and boys and girls. The high educational goals of blacks were somewhat surprising in view of the actual proportion of blacks who attend college in the U. S.

An emerging sense of reality was found when high school and college aspirations and expectations were compared. All subjects, race and sex notwithstanding, showed higher aspirations for finishing college than

Table 3.1. Educational Aspirations and Expectations of Grade School Boys and Girls by Race (Percent)

Educational level	Male				Female			
	Aspirations		Expectations		Aspirations		Expectations	
	Black[a]	White[b]	Black[a]	White[b]	Black[c]	White[d]	Black[c]	White[d]
Finish college	55.09	50.57	37.96	35.36	70.97	59.07	45.16	36.65
Couple years college	11.11	9.89	16.67	12.17	9.68	6.76	19.89	10.68
High school and trade school	11.21	7.22	8.80	4.56	4.30	5.69	4.30	6.41
Finish high school	18.98	21.29	31.48	39.54	13.98	24.20	26.88	40.21
Trade school	.46	.38	1.39	.38	.54	.36	.54	.36
Couple years high school	2.31	6.84	2.31	5.32	.54	2.85	2.69	3.56
Eighth grade	.93	3.80	1.39	2.66	-	1.07	.54	2.14

[a] *n* = 216. [b] *n* = 263. [c] *n* = 186. [d] *n* = 281.

expectations, while expectations for finishing high school exceeded aspirations. Again children's desires seem to be mediated by the reality of their world. That is, graduation from high school is attainable, but college graduation remained a desired goal.

Factors Related to Educational Aspirations and Expectations at Grade School

Very few of the factors which were investigated for a possible effect on educational goals produced significant correlations. Furthermore, even when the results were significant, the correlations were quite low. Table 3.2 presents the correlational data at grade school level organized along three dimensions.[1] The first dimension, individual characteristics of the child, produced the highest correlations. Academic motivation produced the highest correlations for boys' aspirations and expectations (.26 and .34 respectively), whereas the child's concern with future jobs (occupational expectations) showed the highest correlations for girls (.24 and .24). Achievement motivation and self-concept were also significantly associated with expectations and aspirations for both sexes although less so for females than for males.

A second dimension, parenting factors, produced only small associations with either aspirations or expectations. However, a tendency that is consistent with parenting literature did emerge. Particularly for boys, the perception of parents as loving and demanding was significantly correlated with educational aspirations and expectations. Thus, the loving, authoritative parent positively influenced the son's educational aspirations and expectations. Although the strength of the relationship was not as strong for girls, loving parents were marginally significant for aspirations and significant at the .05 level for expectations. One other relationship, or lack of it, seems telling when considering parenting style. The perception of a punishing parent had a negative correlation with girl's educational expectations.

Two other parental factors appeared to be influential in children's educational plans. They can be viewed as opposite sides of the same coin. One factor, talking to parents about dropping out of school, showed a negative correlation; whereas the other, how parents feel about finishing high school, was positively related to the child's aspirations and expectations. This relationship held true for boys and girls. The issue of finishing high school, whether seen from the child's perspective of possibly dropping out, or the parents' expectations for finishing, began to differentiate children at the grade school level. As will be seen later, these relationships became stronger at the high school level.

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[1] For Table 3.2 and other tables in this chapter which cite correlations and their significance levels, the reader should be careful to note that some correlations may be numerically close to "significance" level although not attaining that significance level. Such "near significant" correlations should not be ignored since they may be indicative of trends that could be fruitfully explored in future studies.

Table 3.2. Factors Associated with Educational Aspirations and Expectations of Grade School Boys and Girls

	Boys		Girls	
	Aspirations	Expectations	Aspirations	Expectations
Individual characteristics				
Occupational aspiration	.16*	.18*	.20*	.16*
Mental ability	.13*	.16*	.07	.13*
Educational aspirations	1.00	.53*	1.00	.58*
Educational expectations	.53*	1.00	.58*	1.00
Occupational expectations	.10*	.20*	.24*	.24*
Academic motivation	.26*	.34*	.14*	.12*
Achievement motivation	.21*	.22*	.17*	.19*
Self-concept	.21*	.24*	.22*	.17*
Background factors				
Last grade father attended	.13*	.17*	.14*	.19*
Father's occupation	.16*	.11*	.006	.05
Last grade mother attended	.13*	.20*	.15*	.22*
Parenting factors				
Job choice for child (mother)	.18*	.21*	.20*	.17*
Educational choice for child (mother)	.21*	.22*	.22*	.26*
Talked to parents about dropping out	-.16*	-.15*	-.08	-.18*
Mother's achievement value	.12*	.18*	-.11*	-.14*
Mother's value-character	.05	.04	-.08	-.008
Mother's value-outgoing	.02	.06	.11*	.03
Loving	.15*	.19*	.09	.10*
Demanding	.11*	.15*	.02	.03
Punishing	.008	.03	-.06	-.12*
How parents feel about finishing high school	.11*	.11*	.18*	.16*

*Correlations significant at the .05 level.

Children as early as grade school began to group themselves with respect to their educational aspirations and expectations. The child's individual characteristics clearly had the stronger associations with educational goals. However, a number of parental variables seemed to exert some influence. Whether these relationships were a function of parental input or parental response to their children's characteristics cannot be determined from the correlational data presented in this section. Despite this ambiguity in the direction of effect (most likely it is bidirectional), children were making concrete choices about their education as early as grade school. High school data will demonstrate the potency of such choices since many of the same variables not only showed association with expectations and aspirations, but were stronger.

The third dimension, background factors, produced the fewest number of significant correlations. Only three such factors were significantly related to children's educational aspirations and expectations. The last grade attended by both the father and mother was positively correlated with the child's educational aspirations and expectations, although the mother's educational attainment produced the higher coefficients. One other demographic variable showed itself to be influential--father's occupation. This relationship held for boys only with relatively low order correlations.

The Educational Plans of High School Students

The years between grade school and high school produced some interesting changes, although a number of trends demonstrated relative stability (see Table 3.3). Aspirations for college still exceeded expectations. However, the differences were not nearly as pronounced as they were at grade school level (see Table 3.1). Moreover, black males (28.7%) and females (26.9%) who wished to finish college still maintained their more optimistic attitude relative to white males (15.2%) and white females (13.5%) who wished to finish college. However, at high school age, slightly more males aspired to college than females, unlike the results found at grade school age (see Table 3.1) where the difference between the sexes was far greater and females held the higher aspirations.

Moreover, both aspirations and expectations for finishing college declined considerably from grade school for both races and sexes. This decline may indicate a continuing growth in the reality principle since grade school years. This position is further supported by the increasing number of students whose aspirations and expectations included other educational levels, i.e., a couple years of college, trade school, high school. Rather than large numbers of students aspiring to the highest educational level, the middle ranges have become more popular. Furthermore, grade school and high school aspirations and expectations for finishing high school remained quite stable. Examination of the percentages showed slight or modest differences either between the sexes or the races. This result supports the notion that fifth graders are quite realistic about finishing high school. In other words, a sense of realism about completing high school is demonstrated as early as fifth grade.

Factors Associated with Educational Plans at the High School Level

At the high school level a number of variables resulted in significant correlations with educational aspirations and expectations (see Tables 3.4 and 3.5). Many of the results were similar for both boys and girls. Academic motivation, achievement motivation, and grade point average were all positively associated with aspirations and expectations. Boys and girls were similar except that much higher correlations were found for boys for academic motivation, and achievement motivation. This

Table 3.3. Educational Aspirations and Expectations of High School Boys and Girls by Race (Percent)

Educational level	Male				Female			
	Aspirations[a]		Expectations[b]		Aspirations[c]		Expectations[b]	
	Black[d]	White[e]	Black[d]	White[e]	Black[f]	White[g]	Black[f]	White[g]
Finish college	28.7	15.2	21.3	7.6	26.9	13.5	23.1	7.8
Couple years college	13.0	7.2	13.4	7.6	13.4	10.0	12.9	8.9
High school and trade school	20.8	26.2	21.8	15.6	24.2	28.8	25.8	19.6
Finish high school	17.1	28.5	30.1	40.7	12.9	24.9	23.7	32.7
Trade school	1.4	3.8	1.4	2.7	1.1	3.6	2.2	1.8
Couple years high school	2.3	4.6	1.9	3.0	1.6	3.2	1.1	2.1
Eighth grade	-	3.0	3.2	19.4	-	2.5	3.8	22.4

[a] 7% missing data. [b] 2% missing data. [c] 8% missing data. [d] n = 216. [e] n = 263. [f] n = 186. [g] n = 281.

Table 3.4. Correlation Coefficients for Factors Associated with the Educational Aspirations and Expectations of High School Boys

Factors	Aspirations	Expectations
Individual characteristics		
Occupational aspirations	.42**	.40**
Occupational expectations	.34**	.41**
Academic motivation	.34**	.36**
Achievement motivation	.42**	.33**
Overall grade point average	.21**	.24**
Background factors		
Place to live in future	.22**	.24**
Rather live in country/town/city	.22**	.24**
Number of children like to have	.20**	.23**
Vocational awareness/experience		
Thought about job to have in future	.15*	.22**
Hear about job - in book	.22*	.20**
Talk about future job - teacher	.24*	.30**
Job importance - exciting/interesting	.29*	.31**
Talk about future job with...		
Mother	.06*	.11*
Father	.01*	.04*
Other sibling	.09*	.09*
Other relative	.17*	.11*
Preacher	.17*	.11*
Neighbor/adult friend	.14*	.10*
Other young friend	.19*	.19*
No one	-.12*	-.08*
Job importance - chance to become important person	.19*	.18*
Background characteristics		
Last grade mother attended	.24**	.29**
Last grade father attended	.12*	.21**
School-related factors		
How far parents like you to go	.60**	.48**
How parents feel about finishing high school	.19*	.30**
Talk to parents about dropping out	-.26**	-.41**
Talk about how far should go in school with...		
Mother	.03*	-
Father	.07*	.06*
Sibling	.11*	.12*
Relative	.11*	.12*
Teacher	.23**	.24**
Preacher	.13*	.12*
Neighbor (adult friend)	.16*	.10*
Classmates	.20**	.19*

*p <.01. **p <.001.

Table 3.5. Correlation Coefficients for Factors Associated with the Educational Aspirations and Expectations of High School Girls

Factors	Aspirations	Expectations
Individual characteristics		
Occupational aspirations	.38**	.34**
Occupational expectations	.42**	.52**
Academic motivation	.20**	.16*
Achievement motivation	.33**	.23**
Overall grade point average	.19*	.22**
Background factors		
Choice live in future	.22**	.23**
Age think get married	.21**	.24**
Number of children like to have	.18*	.22**
Vocational awareness/experience		
Thought about kind of job - future	.27**	.32**
How likely get kind of job	.08*	.28**
Job importance - exciting/interesting	.29**	.31**
Talk about future job with...		
Mother	.16*	.18*
Father	.10*	.17*
Sibling	.15*	.18*
Other relative	.12*	.17*
Preacher	.09*	.13*
Teacher	.24**	.23**
Classmates	.17*	.20**
No one	-.22**	-.23**
Background factors		
Last grade mother attended	.24**	.28**
Last grade father attended	.17*	.22**
School-related factors		
How far parents like you to go	.59**	.53**
How parents feel about finishing high school	.19*	.30**
Talk to parents about dropping out	-.29**	-.45**
Talk about how far should go in school with...		
Mother	.05*	.11*
Father	.03*	.09*
Sibling	.05*	.13*
Another relative	.12*	.11*
Teacher	.17*	.15*
Preacher	.14*	.17*
Classmates	.12*	.14*
No one	-.19*	-.18*

*p <.01. **p <.001.

sex differentiation is also supported by the correlations between educational expectations and aspirations and occupational aspirations and expectations which were slightly higher for boys than for girls. These correlation coefficients were relatively high (a range of .34 to .52), indicating a congruence between educational and occupational goals. That is, the higher one's educational goals, the higher one's occupational choices. It can be inferred from these data that boys and girls understood the relationship between educational achievement and occupational roles since their educational goals tended to be consistent with occupational ones. Furthermore, the congruence provided support for the operation of the reality principle mentioned earlier. Since the correlations were higher, high school students were apparently better able to understand the relationship between education and one's career than were grade school students. Another related finding, specific to girls, is that expected age of marriage was positively associated with both aspirations and expectations. That is, as the expected age at marriage increased so too did expected educational attainment. This finding is consistent with the changing nature of sex roles today. In other words, women who delay marriage may do so in order to complete their education.

The factors in the category "vocational awareness/experience" were associated with educational goals in a similar fashion for both boys and girls. Children's expectations and aspirations were affected by communication about them. Children who discussed their future jobs as well as how far they should go in school had higher educational aspirations and expectations. This was true for boys and girls and showed up with a variety of discussants, such as parents, friends, and the like. Morever, those children who discussed their plans with no one had much lower expectations and aspirations. The one sex-related discrepancy involved parent-child communications. Talking to mother and father about future jobs was significantly related with girls' educational objectives, whereas boys showed only one marginally significant coefficient (i.e., aspirations and talking to mother).

Girls' desires for a job that was exciting and interesting were positively correlated with their educational aspirations and expectations. Boys, were as likely to say that they wanted a job that was "exciting and interesting" as girls. They, however, rated job importance in terms of the opportunity to become an important person, whereas girls did not. As for the school-related factors, girl's expectations for how far to go in school were correlated with mother's and father's verbal exchanges. A similar relationship was shown for boys and mothers but not for fathers.

The last grade mother and father attended were the only parent background characteristics that produced significant correlations for boys' and girls' educational aspirations and expectations. This was also important at the grade school level. The correlations were higher for mother's educational attainment, a result which may support the conclusion that mothers have a stronger role than fathers in determining educational aspirations and expectations of children.

Lastly, parents' expectations and aspirations and the communication of such values to their children were related to both boys' and girls' educational aspirations and expectations. How far the parents would like their children to go produced the highest correlations for both boys (.60 aspirations, .48 expectations) and girls (.59 aspirations, .53 expectations). Parental influence was also manifested by another factor--whether or not children talk to their parents about dropping out of high school. This produced a negative correlation; that is, as talking of dropping out increased, aspirations and expectations decreased. The results were almost identical for boys and girls and were consistent with grade school data previously cited. The extent of parental influence is interesting in the face of increasing talk of the generation gap and youth's struggle for independence from parents.

Educational Attainment of the Young Adults

Up to this point, the focus has been on the educational plans of both grade school and high school youth. The present section examines the educational attainment of the respondents as young adults (21 or 22 years of age). Although most aspired to and expected relatively high educational levels, Table 3.6 reveals the failure of most to attain such goals. The predominant educational attainment level was completion of high school for all groups of adults under study (black males and females; white males and females). Moreover, except for black females, a high percentage of the youth completed only a couple of years of high school. This is an interesting finding when one compares these achievements are compared with the goals indicated at grade school and high school. At both grade and high school age black students, particularly black females, had evidenced higher goals (both aspirations and expectations) than had whites. Black males and females actually attained the highest levels of college education. Indeed, relatively large numbers of respondents had been unable to attain the levels of education to which they aspired just three years earlier when they were high school age. A number of factors could account for these results. As children and youth, they might have overestimated their abilities to attain such high educational goals. The work necessary to reach their objectives might have been beyond their ability, or they may have lacked the self-discipline needed to achieve the goal. The school system itself may have lacked the resources to facilitate the actualization of the child's educational plans. Parental influence might not have been strong enough or positive enough to support the child in his endeavors. Also, as the children matured, they may have changed their goals based upon their experiences with the real world. Whatever the reason(s), the fact remains that many children failed to attain the optimistic goals they set for themselves earlier in life. Just what they did and how their attainments compared to their earlier aspirations and expectations is described in the following section.

The previous analyses were concerned with correlates of educational aspirations and expectations obtained in grade school and high school. The following analyses (see Tables 3.7 and 3.8) show the changes in educational plans (defined as aspirations and expectations) from grade school to high school age and demonstrate the congruence or lack of congruence between the choices made by the respondents as grade school children and as high school students. Thus, it can be shown which children were consistent over the six year period as well as those who were inconsistent over that same time span. Data for the cross-tabulation analyses were restricted to those youth for whom data were complete for the three time periods (grade school, high school and young adulthood). For the purposes of this analysis, the six categories of educational attianment used in the previous analyses were collapsed into three (see Table 3.7 for description).

Table 3.6. Educational Attainment of Young Adults[a]

Educational level	Males				Females			
	Black		White		Black		White	
	N	%	N	%	N	%	N	%
College and beyond college (graduate or professional training)	8	8.9	-	-	5	5.1	4	2.0
Two years of college	4	4.4	4	2.7	7	7.2	10	5.0
High school and trade school	25	27.8	44	30.1	47	48.4	48	24.1
Finish high school	31	34.4	60	41.1	28	28.9	80	40.2
Trade school	-	-	1	.7	-	-	2	1.0
Two years high school	19	21.2	31	21.2	6	6.2	46	23.1
Eighth grade or less	3	3.3	6	4.2	4	4.2	9	4.5
TOTALS	90	100%	146	100%	97	100%	199	100%

[a] *n* = 352.

Since such a high proportion of grade school children aspired to, and expected to attain high educational levels, particular attention is paid to this group. As shown in Table 3.7, 66.1% and 44.3% of black and white females, respectively, aspired to high educational levels both at the grade school and high school level. Similar, but higher figures were found for black and white males (71.7% and 50.6% respectively). Despite the fact that the rest of the children lowered their aspirations as they matured, the majority of the remaining high-aspirers set as their goal a medium educational level. Very few (4-7%) changed their aspirations to low educational levels (i.e., eighth grade or two years of high school). Most children whose aspirations at the grade school level were low shifted to medium or high at high school age. No black males or females retained low-level aspirations; all changed their aspirations to medium level choices at high school age. This is not too surprising since low level aspirations were defined as an eighth grade education or two years of high school. About a fourth of the white male youth, however, retained their low aspirations whereas only 20% of the white females did so. The results clearly indicate a high degree of stability between grade school and high school aspirations. Most categories excluding the lowest one showed better than 50% agreement between the educational level stated at grade school and high school age. The one other notable exception was black males who aspired to a medium educational level as children and youth less frequently than any other group. Interestingly, black youth showed greater stability in educational aspirations than did white youth.

Table 3.7. A Comparison of Educational Aspirations at Grade and High School Age

Educational aspirations at grade school	Educational aspirations at high school		
	Low	Medium	High
		Black females	
Low[a]	$\boxed{-}$	100.0	-
Medium[b]	-	$\boxed{64.3}$	35.7
High[c]	5.1	28.8	$\boxed{66.1}$
		White females	
Low	$\boxed{20.0}$	40.0	40.0
Medium	9.1	$\boxed{63.6}$	29.3
High	7.38	48.36	$\boxed{44.3}$
		Black males	
Low	$\boxed{-}$	100.0	-
Medium	5.9	$\boxed{35.3}$	58.8
High	-	28.3	$\boxed{71.7}$
		White males	
Low	$\boxed{27.3}$	72.7	-
Medium	13.2	$\boxed{60.5}$	26.3
High	4.9	44.4	$\boxed{50.6}$

Note. Boxed percentages indicate those who named educational levels in identical categories at both time periods.
[a] Low: Those who completed 8th grade and those who completed two years of high school. [b] Medium: Those who finished high school and those who completed high school and trade school. [c] High: Those who completed two years of college and those who completed college and graduate degrees.

Black youth apparently aspired to higher educational levels than did white youth. The reality principle mentioned earlier does not seem as strong among black children. Their reality might be more one of possibilities. Much as our forefathers thought of this country as the "land of opportunity," so may black youth envision their educational possibilities. Lack of experiential reality testing may make any goal appear possible to attain.

The respondents' educational expectations followed a similar trend to that found with regard to aspirations (see Table 3.8). Of those girls who at grade school level had high expectations, 51% of black youth and 34.1% of white youth still held high expectations at high school level. Males exhibited a similar pattern; 43.8% of the black and 40% of the white males had high expectations at both time periods. Most revealing were those

Table 3.8. A Comparison of Educational Expectations at Grade and High School Age

Educational expectations in grade school	Educational expectations in high school		
	Low	Medium	High
		Black females	
Low[a]	$\boxed{-}$	100.0	-
Medium[b]	4.8	$\boxed{66.7}$	28.6
High[c]	11.8	37.3	$\boxed{51.0}$
		White females	
Low	$\boxed{33.3}$	50.0	16.7
Medium	25.0	$\boxed{69.3}$	5.7
High	19.3	46.6	$\boxed{34.1}$
		Black males	
Low	$\boxed{20.0}$	60.0	20.0
Medium	7.7	$\boxed{38.5}$	53.9
High	4.2	52.1	$\boxed{43.8}$
		White males	
Low	$\boxed{75.0}$	25.0	-
Medium	21.1	$\boxed{59.7}$	19.3
High	9.2	50.8	$\boxed{40.0}$

Note. Boxed percentages indicate those who named educational levels in identical categories at both time periods.
[a] Low: Those who completed 8th grade and those who completed two years of high school. [b] Medium: Those who finished high school and those who completed high school and trade school. [c] High: Those who completed two years of college and those who completed college and graduate degrees.

grade school children whose original high expectations were transformed into low expectations at the high school age. The range became much more extensive, that is, 4.2% to 19.3% changing from high to low expectations, with females demonstrating the greater degree of change.

Despite this increase in low expectations of youth who previously held high expectations, most children fully expected to finish high school (a medium category). Except for black males (38.5%), 60 to 70% of those who selected the medium educational level as grade school children repeated that selection as high school aged youth. In addition, more than 50% of the black males who had medium educational aspirations and expectations at the grade school level made high level choices at the time of the high school testing. It seems that merely finishing high school, for this group of youth, was no longer an adequate goal. Among the children who had low expectations at grade school level, most altered their choice to medium or high educational levels as high school youth. The one exception was white males; three quarters of them still retained low educational level expectations as high school students.

The following analyses (see Tables 3.9 and 3.10) show the changes in educational aspirations at grade school and high school age contrasted to the educational attainments of the students as adults. These tables serve to demonstrate the congruence or lack of congruence between the aspirations held by the respondents both as children and youth and their actual educational attainment as adults.

The data in Table 3.9 show the relationships between grade school educational aspirations and the actual educational attainments of the respondents as young adults. Children whose educational aspirations were middle level were the group that most frequently achieved their goals. Over half of the children of both races who aspired to a medium level of education actually attained such a level. As for those with high aspirations blacks with high educational aspirations more frequently attained that level than did whites with similar goals. Black females were the group that most frequently attained their grade school aspirations of a high educational level; nearly half (48.5%) had achieved their goal. In contrast, 42% of all the black males, 34% of the white males and about 20% of the white females had achieved their grade school goal of a high level education. Turning to those with grade school aspirations for a low level of education, it can be noted in Table 3.9 that half of the males with such aspirations, particularly the white males, 57.1%, achieved their goal. Females did not exhibit this same kind of pattern. None of the black females who had low aspirations attained a low educational level; all had attained a medium educational level. Only 20% of the white females who had low aspirations at grade school level attained that level of education. Sixty percent of the females with low aspirations attained a medium level while the remaining 20% actually achieved a high educational level.

The comparison between high school aspirations and adult attainment showed fewer differences by sex and race (see Table 3.10) than did the previous comparison of attainment by grade school aspirations. For those with high levels of aspirations at high school, from 41% to 59% actually attained that level of education. Black females who as high school students wanted a high level of education were the group that most frequently achieved their goals while white females were the group that least

Table 3.9. A Comparison of Educational Aspirations at Grade School Age with Adult Educational Attainment

Educational aspirations at grade school level	Level of educational attainment		
	Low	Medium	High
		Black males	
Low[a]	$\boxed{50.0}$	-	50.0
Medium[b]	21.1	$\boxed{57.9}$	21.1
High[c]	22.4	35.8	$\boxed{41.8}$
		White males	
Low	$\boxed{57.1}$	47.9	-
Medium	32.6	$\boxed{58.1}$	9.3
High	16.7	48.9	$\boxed{34.4}$
		Black females	
Low	$\boxed{-}$	100.0	-
Medium	13.64	$\boxed{59.1}$	27.3
High	7.1	44.4	$\boxed{48.5}$
		White females	
Low	$\boxed{20.0}$	60.0	20.0
Medium	33.9	$\boxed{52.5}$	13.6
High	24.3	56.0	$\boxed{19.7}$

Note. Boxed percentages indicate those who named the identical educational category at both time periods.

[a] Low: Those who completed 8th grade and those who completed two years of high school. [b] Medium: Those who finished high school and those who completed high school and trade school. [c] High: Those who completed two years of college and those who completed college and graduate degrees.

frequently did so. Respondents who at high school age aspired to a medium level of education frequently (from one half to three quarters) obtained that level. Of those with medium aspirations that did not achieve that goal, more achieved a lower educational level than a higher educational level except for black females who more frequently achieved a higher level. Those who had low aspirations at high school age were the group who most frequently achieved their goal particularly so for the black males, all of whom attained a low level of education. The remaining low aspirers most frequently improved their attainment by one level, moving from low to medium, except for the black females who increased by two levels, from the low to the high level.

Table 3.10. A Comparison of Educational Aspirations at High School Age with Adult Educational Attainment

Educational aspirations at high school	Level of educational attainment		
	Low	Medium	High
		Black Males	
Low[a]	$\boxed{100.0}$	-	-
Medium[b]	25.0	$\boxed{54.2}$	20.8
High[c]	13.2	35.9	$\boxed{50.9}$
		White males	
Low	$\boxed{75.0}$	25.0	-
Medium	20.9	$\boxed{71.6}$	7.5
High	11.8	33.3	$\boxed{54.9}$
		Black females	
Low	$\boxed{66.6}$	-	33.3
Medium	3.6	$\boxed{71.4}$	25.0
High	2.3	38.6	$\boxed{59.1}$
		White females	
Low	$\boxed{86.6}$	13.3	-
Medium	26.3	$\boxed{68.4}$	5.3
High	9.9	49.3	$\boxed{40.9}$

Note. Boxed percentages indicate those who named the identical educational category at both time periods.
[a]Low: Those who completed 8th grade and those who completed two years of high school. [b]Medium: Those who finished high school and those who completed high school and trade school. [c]High: Those who completed two years of college and those who completed college and graduate degrees.

Black females exhibited an interesting pattern in and of itself. A third of the black females who had low aspirations as high school students actually achieved high educational levels. In contrast, none of the white females or males of both races with low aspirations at high school age achieved a high level of education. Furthermore, very few black females (2 to 4%) with high and medium aspirations attained only a low level of education. From 10 to 13% of the other race-sex groups, in comparison, aspired to a high level of education but achieved only a low level, and 20% to 25% of those with medium level aspirations actually attained only a low level of education.

For the most part, the respondent's educational aspirations at high school age show a marked consistency with actual attainment. Those with high aspirations show the greatest divergence between wishes and attainment, an indication perhaps of the reality principle exerting some effect. However, the high percentage of individuals with low aspirations and low attainment are not encouraging. Yet, a third of the black females did attain a high educational level, despite medium aspirations at grade school that decreased to low aspirations at high school age. The qualities of this group are worthy of further investigation.

FINDINGS

Part 4: Significant Others for the Life Plans of Low-Income Black and White Youth

By

Gary W. Peterson and Mary Elizabeth Stivers

Introduction

During the social development of adolescents there are important persons who influence the life patterns and goals that youth set for themselves. In the research literature on the socialization of youth, influential individuals have been referred to as "significant others" who serve as sources of guidance and information for young people as they make important life decisions and mature into adulthood. According to the symbolic interaction perspective, for example, an individual's self-concept arises during the course of social interaction with persons defined as significant others (Cooley, 1902; Mead, 1934). That is, a person's sense of identity and life direction are influenced by the attitudes, opinions, and communications of specific individuals who become identified as important referents, or sources of information.

Special attention by social scientists has been devoted to significant others (SOs) such as parents, peers, and teachers and their influence on the life plans of young people (Biddle, Bank, & Marlin, 1980; Haller & Portes, 1973; Kandel & Lesser, 1972; Otto & Haller, 1979; Picou & Carter, 1976; Scritchfield & Picou, 1982; Sewell, Haller, & Portes, 1969). Some of this literature has proposed that adolescents tend to branch out beyond the family and become more attentive to the expectations of a diverse set of persons, including peers and teachers (Kandel & Lesser, 1972; Williams, 1972, 1975). This development becomes especially apparent as young people establish wider social contacts at school and in the larger community.

This diversification of SOs does not mean, however, that adolescents will become inattentive to the expectations of parents as they become responsive to SOs outside the family. Instead, adolescents often establish a balanced relationship between parental and peer pressures for most issues. Furthermore, youth tend to be selective about the specific SOs with whom they consult, depending on the particular issue of concern. Peers, for example, seem to have the greatest influence on personal or "lifestyle" issues such as friendship choices, dating relationships, and styles of dress (Brittain, 1963; Coleman, 1978, 1980; Sebald & White, 1980). Parents, on the other hand, tend to have the greatest influence on such future career decisions as the educational and occupational plans of youth (Coleman, 1978; Haller & Portes, 1973; Kandel & Lesser, 1972; Picou & Carter, 1976; Rehberg & Westby, 1967; Scritchfield & Picou, 1982; Sewell et al., 1970; Williams, 1972). In contrast to the extensive research on career decisions, parent-peer orientations in such life areas as future marital and family plans have received little attention in the existing literature.

Two types of SOs, definers and models, provide another dimension to the complexity of the current literature on this topic (Otto & Haller, 1979; Picou & Carter, 1976; Sewell et al., 1969; Scritchfield & Picou, 1982). That is, definers are persons who hold and communicate role expectations to particular individuals, while models are persons who serve as objects of emulation for role behavior. In terms of the occupational plans of youth, parents and teachers have been identified in the existing research as definers, whereas peers seem to have functioned as models.

Although several studies have been conducted on the influence of SOs, a major objective of this section is to address some of the deficiencies in the existing research. One of these shortcomings involves the failure of previous research to investigate longitudinally the changing patterns of SOs that youth identify. A second deficiency is concerned with the idea that little attention has been focused on the distinctive patterns of SOs when different kinds of life decisions were considered (e.g., marriage, family, and occupational plans). A third problem involves the fact that few direct comparisons have been conducted between the SO choices of black and white youth (Scritchfield & Picou, 1982). Finally, the SO choices of such special populations as low-income white youth from rural Appalachia and low-income blacks from the Southeastern portion of the United States have not been examined.

The influence of particular SOs on the career and family plans of young people has been important in the lives of low-income youth. The review of literature in Chapter II includes a discussion of this influence on white youth from Appalachia and black youth from the South, the characteristics and patterns of referents, and the advantages and disadvantages experienced from the powerful influences of family members who function as SOs. The discussion also includes how the socioeconomic status of young people creates conditions that affect the availability and nature of SOs' influence. (Refer to the section on significant others in Chapter I.)

Consistent with the ideas about SOs reported in the review of literature, Chapter II, one purpose of this study was to examine the changing patterns of SOs who function as definers and influence the career plans of low-income, white youth from rural areas of southern Appalachia and low-income blacks from the rural South. To accomplish this, longitudinal data were examined on the SO choices of black and white youth during early adolescence, late adolescence, and early adulthood.

A second purpose of this study was to compare (and examine for differences) the patterns of SO choices of youth for occupational plans with their SO choices for marriage and fertility plans. Based on previous work in this area, it might be expected that parents and teachers will predominate as definers for occupational plans. In the case of marriage and family plans, the present analyses were largely exploratory because the primary SOs for these areas have not been clearly identified in the existing research. The final purpose was to examine gender and racial differences in the selection of mothers, fathers, extended family members, and nonfamily members (i.e., peers and teachers), as SOs by low-income rural youth.

Procedures

The responses of the young people included in the following SO analyses are those from sample members of intact families who had participated in the study during early adolescence (1969), late adolescence or high school (1975), and early adulthood (1979). Only youth from intact families were considered in these analyses to ensure that both parents were available as potential SOs.

Three items were used to identify the SOs who influenced the occupational plans of the low-income youth. Specifically, the youth were asked during each data collection phase (1969, 1975, and 1979) to put a check by each person who had talked to them and was important for advice about their job plans. These items allowed longitudinal comparisons to be made on the changing patterns of SOs for occupational plans. Possible SO choices for these items included "mother", "father", "older sibling", "other relatives", "teachers", "peers", "someone else" and "no one". In the 1979 early adulthood phase "spouse" was added.

Two items included only in the high school (1975) data collection phase made possible the identification of SOs for marriage and fertility plans. These items also made possible a cross-sectional comparison between the SO choices of low-income youth for occupational versus marriage and fertility plans during late adolescence. Youth were asked to identify who had something to do with their ideas about (a) when they should marry and (b) how many children they would like to have.

Given the binary nature of the SO data (i.e., each respondent either did or did not select a particular person as a significant other), chi square tests were used when comparing separate samples, as for race and gender differences, whereas McNemar's test (Hays, 1963) was used when comparing the same subjects over the three sampling periods. In fact we used a paired t-test applied to the zero-one data and verified that for these relatively large sample sizes the results were essentially the same as for the McNemar's test.

Results

Significant Others for Occupational Plans

White youth. Table 4.1 shows the percentage of white Appalachian males and females who chose each SO for occupational decisions across the three sampling periods. Results of the McNemar's tests comparing the SO choices of white youth across the three sampling periods are also shown. A McNemar's test was performed for each SO selection to test for differences between the two time periods. Significant other choices in 1969 were compared to those in 1975 and those in 1979 were also compared to 1975.

As expected, mothers and fathers were more frequently selected as SOs by male and female youth than alternative referents across the three sampling periods. The only exception to this pattern occurred in late adolescence (1975) when 58% of the female adolescents chose peers compared to only 51% who chose their fathers as SOs. Male youth more frequently selected their father as principal SO, whereas females chose their mother.

Table 4.1. Percentages and Period Comparisons of Significant Other (SO) Choices for Occupational Plans in Early Adolescence, Late Adolescence, and Early Adulthood of White Male and Female Youth

	Sampling periods				
Choices of SOs	1969 Early adolescence %	Attained significance[a] 1969 vs. 1975	1975 Late adolescence %	Attained significance[a] 1975 vs. 1979	1979 Early adulthood %
			Males (n = 134)		
Mother	54	*	65		63
Father	61		67		63
Older siblings	27	***	47	***	28
Other relatives	22	***	36	***	18
Teacher	13	***	43	***	18
Peers	37	*	50	*	38
No one	13	*	7		2
Spouse	-		-		36
			Females (n = 168)		
Mother	71		73	*	64
Father	43		51		54
Older siblings	26		33		31
Other relatives	30		39	***	12
Teacher	12	***	45	***	14
Peers	38	***	58	***	9
No One	7		9		2
Spouse	-		-		67

[a] * = $.01 < p < .05$, ** = $.001 < p < .01$, *** = $p < .001$.

Other important trends in SO choices were apparent for the occupational plans of white youth across the three sampling periods. The frequency with which teachers were selected increased between early and late adolescence, then decreased at the young adult phase. Compared to nuclear family members and peers, the frequency of selecting "other relatives" was not very high for male and female youth during the three survey periods.

Results of the McNemar tests showed that males and females appeared to select a wider diversity of SOs in late adolescence (1975) than in either the early adolescent (1969) or early adulthood (1979) periods. Specifically, both male and female youth chose peers, teachers, and others more frequently, while males also chose older siblings, mothers, and other relatives more frequently in late adolescence as compared to early adolescence. However, by early adulthood (1979), many of these referents (mothers, older siblings, peers, teachers, and other relatives) had declined substantially in the number of times they were selected by these white youth when compared to their choices in late adolescence (1975).

Black youth. Table 4.2 shows the percentage of black male and female youth who chose each SO for occupational plans across the three sampling periods. Results also are shown for the McNemar tests which compared the SO choices of black youth across the three sampling periods using the same procedure described in the previous section for white youth.

Black youth tended to select mothers and fathers more frequently than any other referents in patterns similar to white youth across the three sampling periods. The only exceptions to this tendency occurred in late adolescence (1975) when black females selected older siblings (41%), teachers (41%), peers (38%), and other relatives (33%) more often than

Table 4.2. Percentages and Period Comparisons of Significant Other (SO) Choices for Occupational Plans in Early Adolescence, Late Adolescence, and Early Adulthood of Black Male and Female Youth

	Sampling periods				
Choices of SOs	1969 Early adolescence %	Attained significance[a] 1969 vs. 1975	1975 Late adolescence %	Attained significance[a] 1975 vs. 1979	1979 Early adulthood %
			Males (*n* = 66)		
Mother	50		57		64
Father	61		48		56
Older siblings	21		30	*	48
Other relatives	11	*	25		23
Teacher	23	*	47		30
Peers	27		45		32
No One	7		5		3
Spouse	-		-		20
			Females (*n* = 72)		
Mother	75	*	60	*	75
Father	47	*	31	**	49
Older siblings	21	**	41		43
Other relatives	18		33		17
Teacher	29		41		22
Peers	15	**	38		32
No one	8		7		3
Spouse	-		-		26

[a] = .01 < *p* <.05, ** = *p* < .01.

fathers (31%). However, black females increased their choice of fathers during early adulthood (1979). Compared to the choices of nuclear family members or peers as SOs, the frequency of selecting "other relatives" by low-income black youth was not very high during any of the three sampling periods.

The McNemar tests on the choices of black youth demonstrated a pattern of SO selection for occupational plans not unlike that of white youth. Table 4.2 indicates that black males and females selected a somewhat wider diversity of SOs in late adolescence (1975) than in either early adolescence (1969) or early adulthood (1979). That is, black males chose other relatives and teachers more frequently, while females (shifting from parents) chose older siblings and peers more often during late adolescence as compared to early adolescence. In contrast to white youth, black youth did not demonstrate a decline in the diversity of SOs that were chosen from late adolescence (1975) to early adulthood (1979). Instead, the selection of fathers and mothers as SOs by females and older siblings by males sustained a systematic increase during this period.

Significant Others for Fertility and Marriage Plans

White youth. During the 1975 data collection phase (late adolescence), the youth were asked to identify those SOs who had influenced their decisions about when to marry and how many children to have (Table 4.3). Chi square tests were used to compare the SO choices of these youth for marriage and fertility plans with their SO choices for occupational plans.

As evidenced by the percentages shown in Table 4.3, the "no one" category was selected by both white male and female youth in higher levels than any of the other alternative SO choices for fertility plans (number of children). Additionally, mothers and fathers were chosen as SOs in fairly high percentages. The "other relatives" category often ranked behind the selection of peers and was not an especially frequent choice of these youth.

An important pattern revealed by the chi square comparisons was that most of the SO choices for fertility plans were selected much less frequently by both male and female youth than comparable choices for occupational plans. The one exception to this pattern was the "no one" choice, which was much more likely to be chosen by both male and female youth for fertility than for occupational plans.

The percentages in Table 4.3 also show the frequency with which white youth identified SOs for age of marriage plans. Mothers and fathers were the most frequently chosen SOs for marriage plans by both male and female white youth. Males more often selected the "no one" category while females more often consulted with other relatives and peers as the most frequent referents besides their parents. The chi square comparisons revealed that the "no one" category was chosen by males and females significantly more frequently for age of marriage decisions than for occupational plans. In addition male adolescents chose all the possible SO selections for marriage plans (except the "other relatives" and "no one" categories) significantly less frequently than corresponding selections for occupational plans.

Table 4.3. Percentages and Topic Comparisons of Choices of SOs for Occupational Plans Versus Fertility (Number of Children) and Age of Marriage Plans of Male and Female Youth at Late Adolescence by Race

	SO Choices at late adolescence (1975)									
Choices of SOs	Fertility plans (FP) %	Attained significance[a] FP vs. OP	Occupational plans (OP) %	Attained significance[a] OP vs. AMP	Age of marriage plans (AMP) %	Fertility plans (FP) %	Attained significance[a] FP vs. OP	Occupational plans (OP) %	Attained significance[a] OP vs. AMP	Age of marriage plans (AMP) %
	White males (n = 134)					White females (n = 168)				
Mother	19	**	65	*	53	38	**	73		75
Father	13	**	67	**	40	15	**	51		58
Older sibling	5	**	47	**	22	11	**	33	**	20
Other relatives	7	**	36	*	27	11	**	39		39
Teacher	2	**	43	**	10	1	**	45	**	12
Peers	6	**	50	**	24	15	**	58	**	32
No one	6	**	7	**	35	44	**	9	*	20
	Black males (n = 66)					Black females (n = 72)				
Mother	17	**	57		42	24	**	60		52
Father	10	**	48	*	28	9	**	31		24
Older sibling	10	**	30		23	14	**	41	**	16
Other relatives	5	**	25		18	5	**	33		19
Teacher	3	**	47	**	13	3	**	41	**	19
Peers	9	**	42	**	20	16	**	38		24
No one	68	**	5	**	32	48	**	7	**	26

[a] * = .01 < p < .05, ** = p < .01.

In contrast to the males' choices, the chi square comparisons for females revealed a more selective pattern of differences in significant other choices for occupational versus marriage plans. Specifically, female youth chose older siblings, teachers and peers less frequently for marriage than for occupational plans. Therefore it was as likely for females to consult with their parents and other relatives about marriage plans as it was for them to do so about occupational plans.

Black youth. Table 4.3 shows the percentage of black youth during late adolescence (1975) who identified significant others that influenced their decisions about marriage and the number of children they desired (i.e., fertility plans). Chi square comparisons between these choices and their significant other selections for occupational plans also are shown.

For both black males and females the "no one" category for fertility plans was chosen more frequently than any other SO choice. Both groups also selected mothers as the next most frequently selected SO. In addition, the tests shown in Table 4.3 indicated that both males and females chose the "no one" category more frequently for fertility than for occupational plans. All additional significant other choices (except others) by males and females, in turn, were selected less frequently for fertility plans than for occupational plans.

Table 4.3 also reported the percentages of black youth who identified significant others for age of marriage plans. Examining just the frequencies, both male and female youth chose mothers, no one and fathers most often as SOs for marriage plans. Chi square test results showed that the adolescent males chose fathers, teachers and peers less frequently for marriage than for occupational plans, whereas females chose older siblings and teachers less frequently for marriage than for occupational plans. Conversely, the "no one" category was chosen more frequently for marriage than for occupational plans by both sexes.

Race Comparisons for Significant Others

Occupational plans. Table 4.4 shows the chi square comparisons for race differences in the SO choices for occupational planning of male and female youth across the three time periods. Although a few racial differences were scattered among these comparisons, there was no consistent pattern in which black adolescents made their SO choices differently than white youth across the three sampling periods. Specifically, no racial differences were apparent during early adolescence for males, while fathers and older siblings were selected more frequently by white as compared to black males during late adolescence. On the other hand, during early adulthood, black males chose older siblings and teachers more frequently than white males.

As for the females, black females selected teachers more frequently than white females during early adolescence (1969), whereas white females chose peers in greater percentages than black females. In addition, the selections of fathers and peers during late adolescence and spouses in early adulthood demonstrated racial differences, with white females making these choices more frequently than black females. Similar to males, black females chose older siblings more than white females in eary adulthood.

Table 4.4. Percentages and Race Comparisons of Choices of Significant Others (SOs) for Occupational Plans in Early Adolescence, Late Adolescence, and Early Adulthood for Male and Female Youth

Choices of SOs	Sampling periods 1969 Early adolescence			1975 Late adolescence			1979 Early adulthood		
	Blacks %	Attained significance[a]	Whites %	Blacks %	Attained significance[a]	Whites %	Blacks %	Attained significance[a]	Whites %
				Males (n = 200)					
Mother	50		54	57		65	64		63
Father	61		62	48	*	67	56		63
Older siblings	21		27	30	*	47	48	**	28
Other relatives	11		21	25		36	23		18
Teacher	23		14	47		43	30	*	8
Peers	27		38	45		50	32		38
No one	4		13	5		7	3		2
Spouse	-		-	-		-	20	*	33
				Females (n = 240)					
Mother	75		71	60		73	75		64
Father	47		43	31	**	51	49		54
Older siblings	21		26	41		33	43	*	31
Other relatives	18		30	33		39	17		14
Teacher	29	**	12	41		45	22		15
Peers	15	**	38	38	*	58	32		29
No one	18		7	7		9	3		2
Spouse	-		-	-		-	26	**	67

[a] * = .01 < p < .05, ** = p < .01.

Marriage and fertility plans. Tests for racial differences in the SO choices of youth for family plans (i.e., marriage and fertility plans) were conducted with chi square tests (Table 4.5). Few systematic race differences in these choices were apparent either for age of marriage or fertility plans. In the case of marriage plans, mothers, fathers, and other relatives were chosen more frequently by white females than black females. In contrast, there were no significant racial differences for the SO choices of female youth concerning their fertility plans. Finally, no race differences were demonstrated for any of the SO choices by males, either for age of marriage or fertility decisions.

Gender Comparisons of Significant Others

White youth. Chi square analyses also were conducted for gender differences in the SO choices of white youth for occupational and family plans (marriage and fertility decisions). In the gender comparisons

Table 4.5. Percentages and Race Comparisons of Choices of Significant Others (SOs) for Age of Marriage Plans and Fertility Plans in Late Adolescence (1975) for Male and Female Youth

Choices of SOs	Age of Marriage Blacks %	 Attained significance[a]	 Whites %	Fertility (Number of Children) Blacks %	 Attained significance[a]	 Whites %
			Males (n = 200)			
Mother	42		53	18		18
Father	28		40	12		13
Older siblings	23		22	10		5
Other relatives	18		27	5		7
Teacher	13		10	5		2
Peers	20		24	8		6
No one	42		35	67		63
			Females (n = 240)			
Mother	52	*	75	24		38
Father	24	**	58	9		15
Older siblings	16		20	14		11
Other relatives	19	*	39	5		11
Teacher	19		12	1		1
Peers	24		32	16		15
Others	5		6	7		13
No One	26		20	49		44

[a] * = <.01 < p < .05, ** = p < .01.

concerned with occupational plans, there was some evidence that male and female youth tended to select their same-sex parent as a SO (Table 4.6). That is, males chose fathers more frequently than females during all three time periods, whereas females identified mothers more often than males during early adolescence. Furthermore, male youth tended to choose older siblings more frequently than female youth during late adolescence, whereas, males chose fathers and peers more than females during early adulthood.

On the other hand, in the case of age of marriage plans and fertility, females tended to select parents as SOs during late adolescence more frequently than males (Table 4.7). Specifically, females chose mothers and fathers more frequently for age of marriage plans, plus mothers and peers more often for fertility plans than males. In contrast, males selected the "no one" category more frequently than females for both age of marriage and fertility issues.

Black youth. Comparisons for gender differences in the SO choices of black youth for occupational plans are shown in Table 4.8. Similar to the white youth, there was some tendency for black youth to choose the same-sex parent for occupational plans. That is, males chose fathers more frequently in late adolescence and females chose mothers more frequently in early adolescence. As with the white youth, during early adulthood there were no significant differences in the SO choices of black youth based on sex.

As for age of marriage and fertility plans only one of the SO choices for black youth demonstrated any gender differences (Table 4.9). Black males tended to select the "no one" category more frequently than black females for both age of marriage and fertility plans following the pattern demonstrated previously for white males.

Summary and Discussion

In general, the results of this section indicated that youth from low-income, white and black families identified their parents as SOs more frequently for future career and family plans (i.e., age of marriage plans and fertility) than alternative referents during the three sampling periods. Furthermore, low-income white and black youth selected a more diverse set of SOs (e.g., teachers, peers, other relatives) beyond the nuclear family for occupational plans in late adolescence than either the preceding or later periods. During early adulthood, declines occurred in the diversity of SO choices (e.g., peers, teachers, other relatives) for occupational plans by Appalachian youth probably because many of these decisions about jobs had already been made. Low-income blacks demonstrated more limited declines than white youth in the diversity of referents they chose during the initial years of adulthood.

An unexpected finding was that both black and white youth selected extended family members (i.e., other relatives) less frequently than most of the alternative SO choices across the three sampling periods. These results were inconsistent with previous research pointing to the importance of extended family influences on members of black and Appalachian families (Brown & Schwarzweller, 1970; Ford, 1962; Gurin & Epps, 1966; Manns, 1981; Martin & Martin, 1978; Osipow, 1975; Weller, 1965). One possible explanation might be that the process of socializing youth for career and family

Table 4.6. Percentages and Gender Comparisons of Choices of Significant Others (SOs) for Occupational Plans in Early Adolescence, Late Adolescence, and Early Adulthood of White Youth[a]

Choices of SOs	1969 Early adolescence			1975 Late adolescence			1979 Early adulthood		
	Males %	Attained significance[b]	Females %	Males %	Attained significance[b]	Females %	Males %	Attained significance[b]	Females %
Mother	54	**	71	65		73	63		64
Father	61	**	43	67	**	51	63	*	54
Older sibling	27		26	47	**	33	28		31
Other relatives	22		30	36		39	18		14
Teacher	13		12	43		45	18		15
Peers	37		38	50		58	38	*	29
No one	13		7	7		9	2		2
Spouse	-		-	-		-	36		67

[a] Sample sizes: Males n = 134 and females n = 168.

[b] * = $.01 < p < .05$, ** = $p < .01$.

Table 4.7. Percentages and Gender Comparisons of Choices of Significant Others (SOs) for Age of Marriage and Fertility Plans of White Youth[a]

Choices of SO's	Age of marriage plans Late adolescence (1975)			Fertility plans (number of children) Late adolescence (1975)		
	Males %	Attained significance[b]	Females %	Males %	Attained significance[b]	Females %
Mother	53	**	75	19	**	38
Father	40	*	58	13		15
Older sibling	22		20	5		11
Other relatives	27		39	7		11
Teacher	10		12	2		1
Peers	24		32	6	*	15
No one	35	**	16	63	**	44

[a] Sample sizes: Males n = 134 and females n = 168.

[b] * = .01 < p < .05, ** = p < .01.

Table 4.8. Percentages and Gender Comparisons of Choices of Significant Others (SOs) for Occupational Plans in Early Adolescence, Late Adolescence, and Early Adulthood of Black Youth[a]

	1969 Early adolescence			1975 Late adolescence			1979 Early adulthood		
Choices of SOs	Males %	Attained significance[b]	Females %	Males %	Attained significance[b]	Females %	Males %	Attained significance[b]	Females %
Mother	50	**	75	57		60	64		75
Father	61		47	48	*	31	56		49
Older siblings	21		21	30		41	48		43
Other relatives	11		18	25		33	23		17
Teacher	23		29	47		41	30		22
Peers	27		15	45		38	32		32
No one	4		8	5		7	3		3
Spouse	-		-	-		-	20		26

[a] Sample sizes: Males $n = 66$ and females $n = 72$.

[b] * = $.01 < p < .05$, ** = $p < .01$.

Table 4.9. Percentages and Gender Comparisons of Choices of Significant Others (SOs) for Age of Marriage and Fertility Plans of Black Youth[a]

Choices of SO's	Age of marriage plans Late adolescence (1975)			Fertility plans (number of children) Late adolescence (1975)		
	Males %	Attained significance[b]	Females %	Males %	Attained significance[b]	Females[b] %
Mother	42		52	18		24
Father	28		24	12		9
Older sibling	23		16	10		14
Other relatives	18		19	5		5
Teacher	13		19	5		1
Peers	20		24	8		16
No one	42	*	26	67	*	49

[a] Sample sizes: Males $n = 66$, Females $n = 72$.
[b] * = .01 $p < .05$, ** = $p < .01$.

plans is primarily a function of nuclear rather than extended family members. In contrast, extended family ties have more influence in terms of formal kinship obligations and support in times of crisis (Turner, 1970).

Another important result was that systematic patterns of racial differences in SO choices across the three time periods failed to become apparent. Mothers and fathers, for example, were selected by high percentages of both white and black youth. Furthermore, few racial differences were apparent in the choice of fathers by youth. Given the extensive literature on the strong familistic orientations of Appalachians and the alleged low involvement of black fathers in the socialization process (Brown & Schwarzweller, 1970; Ford, 1962; Frazier, 1962; Moynihan, 1965; Weller, 1965), it might be expected that a greater number of comparisons would have indicated that white youth selected fathers more frequently than black youth. Instead, "deficit" interpretations of the black family were not supported; black mothers and fathers functioned as important SOs who were substantially involved in the socialization of children (Hill, 1971; McAdoo, 1981; Peters, 1981). Apparently, there are strong familistic orientations between parent and offspring within low-income black as well as white families.

The consistent tendency for white youth to designate parents as SOs is further evidence of the powerful influence of family bonds in the rural South. Families of this region tend to have very close ties and a virtual monopoly over the socialization and interest world of their members (Brown & Schwarzweller, 1970). Appalachian families are held together by norms of obligation and mutual support which make them the primary sources of information for their offspring (Looff, 1971; Polansky, Borgman, & DeSaix, 1972; Weller, 1965).

Although the strong parental orientations demonstrated by black and white youth have considerable benefits, the social mobility of young people might be hampered if this affinity for the advice of family members becomes too exclusive. That is, low-income parents often have limited information about educational and career opportunities, and are unable to familiarize their offspring with the possibilities in these areas. This condition of limited information is compounded by the fact that low-income youth from the rural South often remain geographically close to their families where occupational opportunities are still quite limited.

While the consistent influence of parents is certainly evident in these findings, there is also ample support for the tendency of the youth to expand their set of SOs during the adolescent years. That is, both peers and teachers appeared to be selected as referents for career decisions more frequently during late adolescence than in early adolescence. These results are consistent with previous research on adolescents pointing to the increased importance of SOs beyond family boundaries during this period of development and supports the idea that many adolescents establish a balance between the influence of parents and peers on life decisions (Coleman, 1978, 1980; Herriot, 1963; Rice, 1981).

Other findings were concerned with the youth's SO choices for marriage and fertility plans during late adolescence. Black and white youth of both genders selected many of the SO choices for "family plans" (fertility and age of marriage plans) less frequently and the "no one" category more frequently than comparable SO choices for occupational plans. Results of this kind were even more characteristic of males than females. These findings suggest that young people believe that fertility and age of marriage plans are private matters, whereas, occupational plans tend to be influenced by other referents. In addition, the greater tendency of males rather than females to select the "no one" category may reflect that male youth consider fertility and age of marriage decisions more private and therefore communicate with others about these issues less frequently than females.

In conclusion, these results demonstrated a complex pattern of influence by SOs on the life plans of low-income black and white youth. For the occupational plans of youth a variety of SOs (but particularly parents) may influence these decisions either consistently or for short periods of time. For marriage and fertility plans young people often retain the perception that these decisions are more a function of individual decision-making processes rather than a reflection of the opinions of SOs. Thus, the influence of SOs on youth seems to vary widely, depending upon the particular area of life and stage of development.

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FINDINGS

Part 5: Satisfaction with Life Conditions at Early Adulthood

by

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The purpose of this section is to investigate how the men and women of the sample, now in their early adult years, viewed their present life circumstances and their prospects for the future. The data were summarized for the purpose of exploring the respondents' sense of satisfaction with their lives generally, and specifically with four areas related to their educational experiences, occupational achievements, residential locale and living arrangements and, when applicable, their marital relationships.

Along with the review of indicators of current life satisfaction related to residence, school, work and marriage, data also provided information about how respondents compared their present life circumstances to those of five years ago, and finally, how they perceived their prospects for the future. Differences between the views of men and women, whenever they occurred, were identified through the use of chi-square analysis.

Educational Satisfaction

Educational satisfaction was assessed in three ways. The first group of questions explored the young adults' reactions to their total high school experiences. The next group of questions focused on specific aspects of their high school programs. Finally, the students were asked to identify circumstances which they considered to be barriers to their desired educational attainment.

Overall Educational Satisfaction

Three questions served as indicators of overall educational satisfaction. Respondents were asked how they felt about their total high school educational experience, their own performance in taking advantage of this experience, and the grade level they completed. Response categories for these items were: "very satisfied", "somewhat satisfied", "somewhat dissatisfied", and "very dissatisfied". Significant differences between males and females were noted only with respect to satisfaction with the extent to which they took advantage of their experiences (Table 5.1).

Perceived advantage taken. Although the majority of the sample members were comfortable with the extent to which they took advantage of the opportunities available within their high schools, slightly more women than men indicated a sense of satisfaction with this aspect of their high school career. In fact, 29% of the women versus 22% of men were very satisfied, whereas an additional 45.4% of the women and 40% of the men were only somewhat satisfied. Very few respondents of either sex expressed extreme dissatisfaction with the extent to which they took advantage of their high

Table 5.1. Overall Satisfaction with Education

	Very satisfied		Somewhat satisfied		Somewhat dissatisfied		Very dissatisfied		Totals	
	M[a] %	F[b] %	M %	F %	M %	F %	M %	F %	M	F
Total high school education	24.1	31.8	48.6	47.6	20.5	16.1	6.8	4.5	220	267
Advantage taken *	21.8	29.0	40.0	45.4	30.7	21.2	7.6	4.5	225	269
Education level achieved	28.1	29.7	35.3	38.0	25.1	20.8	11.5	11.5	235	279

[a] Male. [b] Female.
*p <.05.

school education and only 21% of the women and 31% of the men indicated they were somewhat dissatisfied.

Education level achieved. Of the three items relating to educational satisfaction, respondents indicated the greatest dissatisfaction with the level of education they had actually achieved. About 12% of the young adults were very dissatisfied with their terminal grade level in high school. In addition, approximately one fourth were somewhat dissatisfied with their attained educational level.

Total high school education. In evaluating their total high school educational experience, about half of the respondents rated their education as somewhat satisfactory. The remaining responses were fairly evenly split between high satisfaction and general dissatisfaction. So the majority of the respondents viewed their educational experience positively.

Satisfaction with Aspects of High School Education

Nine items were used to assess respondents' satisfaction with various specific aspects of their high school education (Table 5.2). Response categories were the same as those used to assess overall educational satisfaction. Significant differences between males and females were noted in two of the nine areas evaluated: basic academic subjects and vocational counseling.

Basic academic subjects. About 40% of the women were very satisfied with the basic academic subjects (mathematics, science, English, etc.) offered; whereas, only about 28% of the men were very satisfied. About half of the respondents of both sexes indicated they were somewhat satisfied with basic course offerings. Males were more likely to be somewhat to very dissatisfied with academic subjects than were females.

Table 5.2. Satisfaction with Aspects of High School Education

	Very satisfied		Somewhat satisfied		Somewhat dissatisfied		Very dissatisfied		Totals	
	M[a] %	F[b] %	M %	F %	M %	F %	M %	F %	M	F
Basic academic subjects**	27.4	40.3	50.9	47.8	16.5	9.5	5.2	2.4	212	253
Vocational counseling*	14.4	18.5	37.8	29.8	21.4	31.9	26.4	19.7	201	238
Quality of teachers	23.2	25.2	53.1	48.8	15.0	19.1	8.7	6.9	207	246
Extra-curricular activities	35.1	29.5	42.3	48.5	14.9	12.7	7.7	9.3	208	237
Equipment and media resources	24.2	33.5	49.0	45.4	16.0	14.2	10.8	6.9	194	218
Variety of electives	13.7	22.0	43.7	38.4	25.9	25.4	16.8	14.2	197	232
Vocational programs	21.2	18.3	41.9	42.2	22.7	20.0	14.1	19.6	198	230
Attention to individual needs	14.3	16.1	38.9	42.8	27.6	22.9	19.2	18.2	203	236
Practical work experience	11.8	16.6	43.6	35.3	24.5	27.8	20.1	20.3	204	241

[a] Male. [b] Female.
*p <.05. **p <.01.

Vocational counseling. Respondents were asked to evaluate the counseling they received to help them decide what to do after high school. For both sexes, the percentage of responses reflecting at least some dissatisfaction with vocational counseling was greater than for any other aspect of education investigated. Males expressed more extreme dissatisfaction with this aspect of their educational experience than with any other. Approximately 48% of the men and 52% of the women were somewhat dissatisfied to very dissatisfied with the vocational counseling they had received. The percentages of men and women who expressed either satisfaction or dissatisfaction was almost the same.

Other aspects. The highest levels of satisfaction were expressed in relation to the quality of teaching, the availability of sports programs, clubs and other extracurricular activities, and to the ancillary services offered. The majority of young adults expressed at least some level of satisfaction with each of these areas. It was noteworthy that no educational aspect was viewed as exceptionally satisfactory or dissatisfactory. Almost half of the respondents were at least somewhat dissatisfied with the attention given to their individual needs and to the practical work experience offered by their high schools. In addition, about 40% expressed dissatisfaction with the vocational and technical programs available in their high schools and with the variety of elective courses offered.

Perceived Barriers to Education

The young adults were asked to evaluate 14 different areas and to assess the degree to which each area was a factor in keeping them from getting the education or training they really wanted (Table 5.3). Respondents reported the extent to which each item was perceived as an educational barrier: "very much", "some", or "very little". When comparing the views of males and females, chi-square analyses showed significant sex differences for only two barriers: family responsibilities, X^2 (2, n = 297) = 33.94, p <.001 and home locale; X^2 (2, n = 293) = 8.85, p <.05.

Family responsibilities. Men and women had very different views about the effects of family responsibilities on their education. Approximately a third of the women but only 5.2% of the men thought that family responsibilities were very important factors in limiting their educational attainment. Seventy-five percent of the men, in contrast to only 47.9% of the women, considered family responsibilities as having little negative impact on their education.

Home locale. More women (12.6%) than men (3.7%) thought that their desire to remain in their home locale was a significant educational barrier. On the other hand, almost 75% of the men but fewer than 60% of the women considered the desire to live close to family and friends to be of little importance toward attaining educational goals.

Other barriers. Not having enough money for training or schooling was rated as being "very much" an educational barrier more often than any other area reviewed. Around a third of the respondents viewed this issue as a very serious barrier. The next most frequently cited educational barrier was the lack of job training opportunities in the home community. About half of the respondents identified this community deficit as at least somewhat to very much a barrier to their educational advancement.

Almost half considered the lack of information about educational opportunities to be a barrier and more than a third of the sample thought that not knowing the right people hindered their educational attainment. About 30% perceived that little opportunity for the development of leadership skills and the lack of a vocational/technical school or college nearby was at least to some degree an educational barrier for them.

Areas which were related to personal and family attributes appeared to have had very little impact on the perceptions of these young adults about educational barriers. Race, sex, and parental interest were cited least

Table 5.3. Perceived Barriers to Education

	Very much		Some		Very little		Totals	
	M[a] %	F[b] %	M %	F %	M %	F %	M	F
Family responsibilities**	5.2	31.3	20.9	20.9	73.9	47.9	134	163
Home locale*	3.7	12.6	23.9	27.7	72.4	59.7	134	159
Money	29.5	38.8	28.1	23.5	42.5	37.7	146	183
Job training opportunities	19.0	21.9	29.9	33.1	51.1	45.0	137	160
Information	10.0	15.3	35.7	31.3	54.3	53.4	140	163
Knowing right people	10.6	14.0	25.0	25.5	64.4	60.5	132	157
Development of leadership skills	5.8	12.8	27.3	26.9	66.9	60.3	139	156
Technical school availability	6.1	10.5	19.1	20.4	74.8	69.1	131	152
Schools attended	9.3	5.7	16.3	21.0	74.4	73.2	129	157
Intelligence	3.7	8.9	18.4	18.5	77.9	72.6	136	157
Effort necessary to attain	6.7	4.5	17.2	22.4	76.1	73.1	134	156
Parental interest	2.3	5.2	11.4	17.0	86.4	77.8	132	153
Race	3.6	3.3	9.5	5.9	86.9	90.8	137	153
Sex	1.5	2.6	2.3	8.4	96.2	89.0	132	155

[a] Male. [b] Female.
*p <.05. **p <.001.

often as barriers followed closely by intelligence and the personal effort that would be required to attain the level of education desired.

Occupational Satisfaction

Overall occupational satisfaction, satisfaction with aspects of their present jobs, and barriers to occupational attainment were the major areas addressed in this section. In addition, the young men and women in the sample evaluated their current occupational circumstances and projected an evaluation of the jobs they anticipated having in five years.

Overall Occupational Satisfaction

The young men and women in the sample were asked to assess their satisfaction with all their occupational experiences since leaving school, as well as with their current jobs and incomes (Table 5.4). The respondents indicated whether they were "very satisfied", "somewhat satisfied", "somewhat dissatisfied", or "very dissatisfied" for each of these occupational issues. Chi-square analysis of the data revealed no significant differences between the responses of males and females in any of the three areas which were evaluated.

Although respondents did not express overwhelming dissatisfaction with either their current jobs, income or occupational experiences to date, the large number of responses indicating moderate satisfaction with each item (nearly half of the respondents for each item) suggests that these young adults believed there was room for improvement in all three areas. About 80% of the sample indicated they were satisfied with their overall work experiences and their present jobs, while about 60% were satisfied to somewhat satisfied with their present earnings. Fewer than 10% of the respondents were very dissatisfied with either their overall job experiences or their present jobs. Close to 20%, however, were very dissatisfied with their earnings.

Satisfaction with Aspects of Present Job

Respondents were asked to indicate their satisfaction with various aspects of their present jobs ranging from their earning potential to the opportunity provided by their jobs for them to use their minds (Table 5.5). The possible responses for each area included: "very satisfied", "somewhat satisfied", "dissatisfied", and "not important to me". Of the nine areas investigated, significant differences between males and females were found in their level of satisfaction for three areas: earning potential, chance to help others, and the opportunity for mental activity.

Earning potential. The differences between the responses of men and women concerning earning potential occurred at two levels; first, more men than women were satisfied with their earning potential. About 75% of the males expressed some degree of satisfaction with their earning potential while only 57% of the females responded similarly. Second, a significant number of women (17.4%) were dissatisfied with the issue of earning potential whereas fewer men (7%) expressed this same view. Additionally, while less than one quarter of either males or females considered the issue of earning potential to be of no importance to them, slightly more females held this view.

Chance to help others. The primary difference between men and women in this area was reflected in their level of positive satisfaction. About half of the women and a quarter of the men were very satisfied with the chance their jobs afforded them to help others; in contrast, about half of the men and a quarter of the women were only somewhat satisfied with this opportunity. The two groups differed only slightly in their level of dissatisfaction and the degree to which the issue was important to them.

Table 5.4. Overall Occupational Satisfaction

	Very satisfied		Somewhat satisfied		Somewhat dissatisfied		Very dissatisfied		Totals	
	M[a] %	F[b] %	M %	F %	M %	F %	M %	F %	M	F
Overall job satisfaction	29.1	27.4	50.7	42.7	13.6	21.0	6.6	8.9	213	248
Present job satisfaction	35.1	36.7	46.3	43.0	13.2	13.9	5.4	6.3	205	237
Satisfaction with earnings	11.1	14.0	49.8	42.1	22.7	22.1	16.4	21.7	207	235

[a] Male. [b] Female.

It is notable that relatively few of the respondents, male (15.9%) or female (19.4%), thought this issue was of no importance to them.

Chance to use mind. The chance to use one's mind on the job was considered to be an important issue to the majority of the respondents. Fortunately for them, almost half of the respondents of both sexes were very satisfied with the opportunities afforded to them in this area by their present job. In contrast, about 24% of the women and 11% of the men viewed how well their jobs afforded them a chance to use their minds as not important. Males were more likely to be satisfied with this aspect of their job, while females were more likely to view this aspect as not important.

Other aspects. Differences by sex were not significant in the remaining six areas of job satisfaction examined. Almost all of the respondents were satisfied with the opportunity provided by their present jobs for steady employment and with the location of their employment. Over half were very satisfied with these aspects and another third were somewhat satisfied. About 90% considered both the location and the steady nature of their work to be important aspects of their employment.

About 75% of those surveyed considered the degree of physical activity and the amount of interest afforded by their jobs to be satisfactory. More respondents considered these aspects as "somewhat" rather than "very" satisfactory. About a tenth were dissatisfied with these two aspects of their present jobs. Again, more than 80% considered the issues related to physical activity and the amount of interest afforded by their jobs to be important to them. Of all the aspects of employment investigated, the two which were most often considered unimportant were the opportunity for an individual to be his or her own boss and the earning potential of the job.

Table 5.5. Satisfaction with Aspects of Present Job

	Very satisfied		Somewhat satisfied		Dissatisfied		Not important		Totals	
	M[a] %	F[b] %	M %	F %	M %	F %	M %	F %	M	F
Earning potential*	22.0	17.4	52.2	40.2	7.0	17.4	18.8	25.1	186	219
Chance to help others**	27.3	49.5	46.0	26.4	10.8	4.6	15.9	19.4	176	216
Chance to use mind*	45.8	43.1	39.1	28.4	3.9	5.0	11.2	23.4	179	218
Steady work	54.3	52.0	34.8	31.8	2.2	5.8	8.7	10.3	184	223
Location	46.7	52.8	30.8	29.8	7.1	9.2	15.4	8.3	182	218
Degree of physical activity	32.6	33.6	42.1	39.6	8.4	9.2	16.9	17.5	178	217
Interesting work	32.2	34.3	41.7	38.0	8.9	5.6	17.2	22.2	180	216
Chance for importance	17.6	26.8	34.7	31.4	30.1	25.0	17.6	16.8	176	220
Chance to be own boss	23.9	29.0	31.3	24.3	17.6	25.7	27.3	21.0	176	210

[a] Male. [b] Female.
*p <.01. **p <.001.

Comparison of Perceptions about Present and Future Jobs

Using the Cantrill ladder, respondents were asked to rank their present job on a scale from *0* to *9* with *0* indicating the worst possible job for them and *9* the best. They were then asked to speculate about their jobs five years in the future and to rank them in the same manner (Table 5.6). In general, both men and women were moderately satisfied with their present jobs and were very optimistic about their future occupational opportunities. When chi-square analysis was used to test for differences between males and females, no statistically significant differences were found for either time period. The following discussion will focus on a comparison of the rankings for the present and future jobs, first for the men and then for the women.

Comparison for males. The rankings of the males' perceptions of their present jobs approximate a normal distribution with most of their ratings

Table 5.6. Comparison of Perceptions about Present and Future Jobs

Ranking		Present	Future
		Males	
Worst possible job	0	4.4	-
	1	4.0	-
	2	4.0	1.3
	3	18.6	2.7
	4	22.6	4.0
	5	23.0	7.6
	6	9.7	18.8
	7	6.2	23.3
	8	4.9	18.4
Best possible job	9	2.7	23.8
		n = 226	*n* = 223
		Females	
Worst possible job	0	8.4	1.1
	1	2.5	1.8
	2	6.5	1.4
	3	17.5	2.2
	4	16.0	3.6
	5	19.3	14.1
	6	12.4	14.1
	7	6.9	17.8
	8	2.2	19.9
Best possible job	9	8.4	23.9
		n = 275	*n* = 275

occurring between the third and fifth levels of the Cantrill ladder. Very few males thought their present jobs were either the worst or the best for them. In contrast, the majority of the men anticipated the rankings of their future jobs would fall between the seventh and ninth levels. Most of the young men appeared optimistic about their chances of achieving the best possible job for them (or close to it) in the near future. None thought the job they would have in five years would be the worst possible one for them, and fewer than 15% anticipated that their future jobs would be ranked as 5 or below.

Comparison for females. The majority of the women ranked their present jobs between the third and the sixth levels. About 10% of the women thought their present jobs were the worst possible jobs for them; likewise, about 10% thought their current jobs were the best possible jobs for them. The women, like the men, were optimistic about their future jobs. Most of the women ranked their future jobs as close to the best possible job, if not the best. Very few young women ranked their future jobs as 4 or below.

Barriers to Occupational Attainment

The young adults were asked to evaluate a list of 15 items and to identify and rate the "importance" or "seriousness" of those things which they perceived as barriers to attaining the jobs they really wanted (Table 5.7). The options for responses to each item were "very much", "some", or "very little". Using chi-square analysis, significant differences between men and women were found in only 4 of the 15 areas examined. These areas were gender, family responsibilities, intelligence and money for school.

Sex. Ninety-four percent of the men but only 75% of the women perceived their gender as having minimal impact on their ability to attain the job they wanted. If one's gender was perceived as a barrier, it was considered as such by only a quarter of the women.

Family responsibilities. Over half of the female respondents thought that family matters interferred with occupational advancement, whereas 80% of the men indicated that they did not perceive family responsibilities to be a barrier. Of the women, 26% identified family matters as being "very much" a barrier while only 1.5% of the men did so. An additional 28% of the women considered this issue to be somewhat of a barrier to their occupational attainment.

Intelligence. The majority of the respondents of both sexes did not consider their own intelligence to be a barrier to getting desired jobs. However, fewer of the females held this view. In both groups less than 6% rated their intelligence as "very much" a barrier. The major differences between men and women were found among those who considered intelligence to be only something of a barrier; 25% of the women but only 12.7% of the men held this view.

Money for school. Overall, more women than men considered the lack of money for school to be a barrier to their eventual occupational attainment. For more than half of the women and nearly half of the men, money for school was at least somewhat of a hindrance to their ability to acquire desirable jobs. For 30% of the women and 24% of the men, money was identified as "very much" a barrier.

Table 5.7. Perceived Barriers to Job Attainment

	Very much		Some		Very little		Totals	
	M[a] %	F[b] %	M %	F %	M %	F %	M	F
Sex**	.7	7.0	4.9	17.7	94.4	75.3	142	158
Family responsibilities**	1.5	26.1	18.2	27.9	80.3	46.1	137	165
Intelligence*	5.6	5.8	12.7	25.0	81.7	69.2	142	156
Money for school*	24.2	30.2	21.5	29.1	54.4	40.7	149	172
Occupational opportunities	38.7	33.5	28.7	32.9	32.7	33.5	150	170
Scarcity of jobs in U.S.A.	20.8	24.7	30.9	37.3	48.3	38.0	149	166
Knowing right people	17.8	18.9	32.9	35.2	49.3	45.9	146	159
Home locale	10.8	17.0	27.0	24.2	62.2	58.8	148	153
Development of leadership skills	6.3	11.9	24.3	27.2	69.4	60.9	144	151
Technical school availability	8.3	9.7	20.7	18.2	71.0	72.1	145	154
Information	7.3	10.4	47.3	42.7	45.3	47.0	150	164
Race	4.7	5.8	12.2	11.7	83.1	82.5	148	154
Effort necessary	3.5	6.5	21.5	20.0	75.0	73.5	144	155
Schools attended	4.3	5.3	12.9	17.9	82.7	76.8	139	151
Parental interest	4.9	4.6	11.2	16.4	83.9	78.9	143	152

[a]Male. [b]Female.
*p <.05. **p <.001.

Other barriers. Generally, respondents of both sexes viewed occupational opportunities both locally and nationally as important barriers to job acquisition. The lack of local opportunities was viewed more often as "very much" a stumbling block to getting desired jobs than was the perceived scarcity of jobs in the United States.

More than half of the respondents believed that lack of information about jobs and not knowing the right people were, at least to some degree, barriers. About 40% of the respondents thought that not wanting to move away from friends or family would hinder them from getting the jobs they really wanted. Approximately a third of both the men and women thought that lack of the chance to develop leadership qualities while growing up, as well as the absence of vocational/technical schools or colleges nearby limited their occupational attainment to some degree.

The effort necessary to find the right job was not seen as a barrier to job attainment by the majority of the sample. Only 25% viewed it as at least somewhat of an influence in their successful pursuit of a job. Sex, race, lack of parental interest and encouragement and schools attended were less often considered barriers to job attainment than all the other issues addressed in this section.

Gender, family responsibilities, intelligence and funds for school were most often identified as barriers to occupational opportunity. These four areas have in common a relationship to external conditions which limited opportunities; occupational opportunities locally, scarcity of jobs nationally, knowing the right people, and money for vocational/technical education or college. Those issues least often perceived as barriers, with the exception of schools attended, all reflected personal characteristics; race, sex, parental interest, and personal effort. All of the issues considered by the respondents to be major barriers to desired occupational attainment were social and economic issues which are amenable to remediation through social programs but unlikely to be affected through personal effort.

Satisfaction with Life Plans and Circumstances

Life satisfaction was assessed in both global and specific terms. All respondents evaluated their present, past, and future life circumstances as well as some specific aspects of their current living arrangements. Those who were married were asked to rate the quality of their marriages.

Satisfaction with Housing, Living Arrangements, and Residential Locale

Four items were used to evaluate the young adults' satisfaction with issues related to housing, living arrangements and residential locale (Table 5.8). Respondents indicated their level of satisfaction with their present proximity to the community in which they grew up as well as their satisfaction with the size of the community in which they were currently residing. Assessments were obtained about the quality of the respondents' housing as well as their satisfaction with their current living arrangements, whether they were living alone, with parents, or with a spouse. Respondents indicated whether they were "very satisfied", "somewhat satisfied", "somewhat dissatisfied", or "very dissatisfied" in relation to each of these issues.

Overall, the majority of young men and women expressed satisfaction with all of the aspects of housing, living arrangements and residential locale surveyed. Dissatisfaction was expressed by about 15% of the sample with the quality of their housing and their present living arrangement. Differences between men and women were identified with respect to views

Table 5.8. Satisfaction with Housing, Living Arrangements, and Residential Locale

	Very satisfied		Somewhat satisfied		Somewhat dissatisfied		Very dissatisfied		Totals	
	M^a %	F^b %	M %	F %	M %	F %	M %	F %	M	F
Living arrangement**	52.2	66.9	31.4	18.8	11.1	10.0	5.3	4.2	207	260
Community size*	53.1	60.6	34.4	33.0	5.7	5.3	6.7	1.1	209	264
Closeness to home community	55.3	58.3	34.1	30.7	5.1	7.2	5.5	3.8	217	264
Quality of housing	46.8	51.6	35.5	35.0	12.8	10.2	4.9	3.1	203	254

^{a}Male. ^{b}Female.
*p <.05. **p <.01.

about community size, $X^2(3, n = 472) = 11.30$, $p < .05$; and current living arrangements, $X^2(3, n = 467) = 12.02$, $p < .01$.

Community size. Generally, most respondents were satisfied with the size of the community in which they were currently living. About nine-tenths of the sample were at least somewhat satisfied with their community size. Differences between men and women were apparent in the extreme categories. More women than men were very satisfied, and more men than women were very dissatisfied with their community size.

Living arrangement. Over 80% of all respondents expressed some degree of satisfaction with their current living arrangements. More than two-thirds of the women but only half of the men were very satisfied with the composition of their households. However, more of the men were only somewhat satisfied than was true for the women.

Closeness to home community and quality of housing. About 90% of the young men and women surveyed were satisfied with the closeness of their current residence to the community in which they grew up. Satisfaction with the quality of their present housing was also expressed by about 85% of the respondents.

Marital Happiness

Married respondents evaluated the quality of their marriages by indicating whether they were "very happy", "a little happier than average", "just about average", "not too happy", or "unhappy" (Table 5.9). About two-thirds of those responding reported that their marriages were very happy. Fewer than 8% rated their marriages as either not too happy or

Table 5.9. Marital Happiness

Perception*	Males[a]	Females[b]
Very happy	63.7	67.6
A little happier than average	12.1	12.8
Just about average	16.5	11.7
Not too happy	3.3	4.5
Unhappy	4.4	3.4

[a] _n_ = 91. [b] _n_ = 179.
*NS.

unhappy. No statistically significant differences (chi-square analysis) were found in the way men or women evaluated their marriages.

Perceptions of Life Plan Attainment

The young adults were asked to reflect about the plans and ambitions they had when they were in high school and to evaluate their current status relative to these life plans (Table 5.10). Respondents indicated whether their plans had worked out better than they had hoped, about the same as they had hoped, or worse than they had hoped. Overall, the views of the women were more positive than those of the men. These differences were shown to be statistically significant when examined by chi-square analysis. About a fourth of the men but only 14% of the women thought their plans were working out worse than they had expected.

Comparison of Perceptions About Past, Present, and Future Life

Respondents ranked their perceptions about their present life circumstances on a scale from _0_ to _9_ on the Cantril ladder with _0_ representing the worst possible life for them and _9_ representing the best possible life for them. They were then asked to evaluate their past life situations overall and to anticipate the future in the same manner. Results are illustrated in Table 5.11. Chi-square analysis was used to test for differences between the responses of males and females. No significant differences were found for any of the three measures of life situations. The majority of the respondents, whether male or female, viewed their past lives as only moderately satisfactory with a large number perceiving those circumstances as leaning toward the worst possible one for them. In general, however, both the men and the women were extremely optimistic about their futures and their abilities to achieve the best possible lives for themselves. The following discussion will focus on a comparison of rankings for the three assessment periods, first, for men and then for women.

Generally, the male respondents felt better about their present circumstances than they did about their past and were even more optimistic about their futures. Responses evaluating the past were distributed fairly evenly among categories _1_ through _6_ with the largest percentage falling in

Table 5.10. Perceptions of Life Plan Attainment

Perception*	Males[a]	Females[b]
Better than hoped for	39.3	43.5
About the same	37.1	42.1
Worse than hoped	23.6	14.4

[a]n = 229. [b]n = 278.
*p <.05.

the third category. The response pattern for the evaluation of present circumstances shifted upward so that the majority of responses occurred between the third and seventh categories with the largest percentage falling in the fifth category. Future projections optimistically placed life circumstances in the highest three categories with about a third of the respondents foreseeing their future lives as being the best possible for them.

Like the men, female respondents felt that their present life circumstances were an improvement over the past, and looked toward the future with great optimism. Responses about their past lives were fairly evenly distributed among all categories except for the one representing the worst possible life. For the present time frame, responses were fairly evenly distributed between the fourth and the ninth categories with only one particular category receiving a noticeably higher representation. The distribution for future projections was greatly skewed toward high expectations. Forty-five percent of the women foresaw their future lives as being the best possible for them, while nearly a third ranked their futures in the next highest category.

Conclusions

A number of issues and questions arise as a result of this preliminary study which may serve as an impetus for future research. As suggested earlier, this sample of young men and women, now entering their twenties, perceived their lives, based on all of the measures utilized, as only moderately successful. However, when asked to assess their opportunities for future success and happiness, the sample reported overwhelmingly high hopes.

A question which remains unanswered by this descriptive study is why these young men and women are so strongly optimistic about their futures. An analysis of the occupational aspirations and expectations (Farris & Boyd, 1983) of these same young people at preadolescence, adolescence, and young adulthood revealed an increasing gap over time between the sample's increasingly low expectations and consistently high aspirations. Why do these young adults remain optimistic about the quality of their lives despite the dissonance between their dreams and their anticipated life circumstances? It could be that even though many low-income young adults recognize the importance of training and/or some form of education, they

Table 5.11. Comparison of Perceptions about Past, Present and Future Life

Ranking		Past	Present	Future
			Males	
Worst possible life	0	6.8	.5	.5
	1	9.0	1.4	-
	2	11.3	3.6	.5
	3	17.6	11.7	1.4
	4	12.2	14.0	4.1
	5	15.8	23.4	6.9
	6	12.6	15.3	10.1
	7	5.9	16.7	21.2
	8	5.0	9.0	24.3
Best possible life	9	4.1	4.5	31.2
		_n_ = 222	_n_ = 222	_n_ = 218
			Females	
Worst possible life	0	4.0	.7	-
	1	6.8	1.4	-
	2	11.9	.7	.7
	3	14.0	6.5	1.8
	4	12.6	13.7	1.1
	5	17.3	16.5	3.3
	6	10.8	16.2	5.9
	7	9.7	19.8	14.8
	8	5.4	12.9	27.7
Best possible life	9	7.6	11.5	44.6
		_n_ = 278	_n_ = 278	_n_ = 271

also believe that they do not have much control over the circumstances that allow them such opportunities (Nelson & Frost, 1971; Stevic & Uhlig, 1967). Thus, they may remain optimistic at the same time they are realistically assessing their current life circumstances. There is a need for further research to identify those mediating influences which allow these young adults to dream dreams that others may believe are only windmills of their minds.

CHAPTER V
SUMMARY, CONCLUSIONS, AND IMPLICATIONS

In the preceding pages we have traveled metaphorically with over a thousand children from low-income areas in the South. We met them when they were fifth and sixth graders and again, when as juniors and seniors, they were about to reach the station in life called graduation from high school. We saw them next a few years after they had embarked on the journey through adulthood. There are many events and milestones on the road to adulthood. Our purpose was to study their early plans for the journey and how, or if, these plans changed as they approached adulthood. We were concerned, too, with the factors that influence these plans. And we wanted to know, finally, the places they had reached as young adults and how satisfied they were with their destinations. It is our purpose, now, to summarize what we have learned about their plans and progress. Following that, we will attempt to show some implications of the findings that may make the journey a little easier for groups that follow them.

Male Occupational Plans and Attainment

At grade school age, the bulk of both black and white boys had high occupational goals, with 54% of the black and 42% of the white boys aspiring to professional-technical jobs, the highest occupational category. Both black and white boys, however, had somewhat lower expectations, suggesting that even at this young age they were able to differentiate between the kind of job they really would like to have and the kind they thought they actually would have.

The concentration of the boys' occupational choices in high-prestige categories stands in contrast to the low educational and occupational attainments of their parents. From 80% to 95% of the parents, depending on race and sex, had not completed high school.

The factors most strongly related to grade school boys' occupational aspirations were mother's occupational wishes and expectations for the boy. Mother's achievement value, father's occupation, and the boy's intellectual ability were also positively related to boys' occupational aspirations, while mother's anomie was negatively related.

At late high school age, about 42% of the black and 29% of the white boys aspired to the highest-prestige occupations. Among those naming jobs at this level, there were greater differences between aspirations and expectations than were found in the grade-school wave of the study. This suggests that a certain amount of reality testing had taken place; although many still wanted the high prestige jobs, more of those who did so indicated that they actually expected to achieve lower prestige jobs.

Cross-tabulations of job levels named at grade school age by job levels named at high school age were constructed to show changes in occupational plans between the two time periods. For this purpose, the nine occupational categories were trichotomized as high, medium, and low level occupations.

About 64% of the black and 59% of the white males who aspired to a high-level occupation at grade school age named an occupation at the same level at high school age. Most of those who lowered their aspirations chose a medium level as opposed to a low-level occupation. The most consistent group were those who originally chose a medium-level occupation. The least consistent were those who originally chose a low-level occupation. From half to two-thirds of those who originally chose either a medium-level or a high-level occupation chose an occupation in the identical category at high school age. This strongly suggests that grade school aspirations influences high school aspirations or, of course, that the same factors that influence one also influence the other.

Boys in both subsets exhibited a striking lack of occupational goal attainment. This is especially true of those youth who aspired to high level occupations. Of black and white grade school boys with high aspirations, 16% and 17% respectively, attained jobs at that level. The attainment level of the high school boys showed an expected racial difference. While the grade school and high school aspirations of black students included a higher proportion aspiring to high level jobs, white males actually attained a greater percentage of positions at that level with 11% of black youths and 18.7% of white youths reaching their goals.

There was a marked difference in the goal attainment patterns of boys aspiring to high level jobs and those aspiring to medium level jobs. Grade school medium level aspirations coupled with attainment showed a positive picture with 50% of black boys and 84% of white boys attaining their goal and an additional 16% of black boys and 10% of white boys at this aspirational level actually achieving high level positions. The percentage of youths attaining their medium level goals dropped in the high school years with only 42% of black youths and 55% of white youths attaining the desired job level. In addition, the majority of the remainder in both groups actually attained low level jobs.

Very few boys aspired to low level jobs at either the grade school or high school level (Tables 1.1 and 1.3). Approximately 40% of both grade school subsets attained their goal, while 100% of black high school youth and 58% of white high school youth attained this goal.

It appeared from the correlational data that the confidence of a high school youth in achieving his occupational aspiration and his self-image as a young adult were positively related to the attainment of his occupational aspirations. However, there was a negative correlation between the individual's desire for a job that provides interesting and rewarding work and occupational attainment.

Female Occupational Plans and Attainments

One of the most striking findings for females was the high proportion who aspired to professional-technical occupations. Fully 75% of the black and 70% of the white grade school girls aspired to such jobs. Their expectations were somewhat lower than their aspirations which suggests a certain realism in the occupational plans of the girls. They know what they would like, but some, at least, do not think they will achieve their goals.

The higher occupational goals of black as compared with white girls was even more apparent at high school age than at grade school age. Both groups had lowered their goals. Yet 60% of the black girls still aspired to a professional-technical job as did 43% of the white girls. Approximately 48% of the black high school age girls expected to have such a job but only 24% of the white girls had such expectations. At high school age, fewer than 2% of the black girls aspired to or expected to hold a laboring job while 3.4% of the white girls aspired to such a job and 14.3% expected that they would actually attain a laboring job. The strongest association with high school girls' occupational aspirations and expectations were their educational aspirations and expectations. Thus, their occupational and educational plans were consistent with each other.

A comparison of the occupational goals of girls at grade school and high school age showed a different type of consistency. The bulk of the girls named occupations at the same level at both time periods. Of those who did not, girls who originally aspired high were not likely to drop to the lowest occupational level and those who originally aspired to the lowest level jobs were not likely to change their aspirations to a high level job.

The actual occupational attainments of young adult women were far removed from their plans at earlier ages. Despite the large number of girls who aspired to professional-technical occupations, only about 6% of the white and 7% of the blacks were working at such jobs as young adults.

Of all the girls who at grade school age aspired to some high level occupation, only about 10% of both races attained such a job as a young adult. Close to 60% of the remainder attained a mid-level job. Of those who at grade school age aspired to a mid-level job, 65% of the whites and 50% of the blacks attained a mid-level position whereas 35% of the whites and 50% of the blacks attained a low-level job. Turning to high school aspirations, about 9% of the black and 11% of the white girls who at high school age aspired to high level occupations were actually working at such a level. Over a third of the black young women and almost a third of the white ones who in 1975 aspired to high level occupations were, in 1979, working at the lower level jobs.

It was found that the higher the mother's educational level, the greater was the concordance between the girls' occupational aspirations and attainments. The more confidence a girl had at high school age that she would get the job she wanted, the more likely she was to attain the job to which she aspired. No association with obtaining occupational goals was found for mental ability, achievement motivation as measured at grade and high school, or for self-image as measured at adulthood.

When occupational choices of females were classified as "traditionally feminine", "traditionally masculine", or "gender neutral", it was discovered that 92% of the occupational choices of grade school girls were for jobs classified as feminine. At high-school level 78% of the choices were for feminine jobs and another 13% were for jobs that were gender neutral. Further, it was discovered that at grade school level 77% of the girls restricted their occupational preferences to four jobs: teacher, nurse, secretary, and beautician. At high school age these four jobs, plus social worker, accounted for 57% of their choices.

The occupational orientations of the young women were explored to determine whether they were as prepared as the young men in the study to enter the world of work. It was found that about a quarter of the young women, at high school age, would consider the role of "housewife only" as an alternative to the job for which they aspired, and another 12% chose "housewife" as the job they really wanted. High school girls were somewhat less likely than boys to have talked about their future jobs with various family members. The most important differences between the sexes that might reflect orientation to the world of work were job experiences and the kind of rewards sought from an occupational role. Males were more likely to stress such extrinsic features of a future job as steady employment and the chance to make money. Females stressed such intrinsic features as the opportunity for helping other people and the chance to do exciting work.

Educational Plans and Attainment

In some ways, the educational plans of children and youth are a better index of their status aspirations than are occupational plans. Children at grade school age, in particular, may not be able to articulate the job they wish to hold. The questions on educational plans, however, are more general and relate to the level of education desired. Educational aspirations and expectations were measured both at grade and high school age. The actual educational attainment was obtained in the third wave of the study when the respondents were young adults about four years beyond high school age.

One of the most striking findings was the high proportion of the respondents who, at grade school age, aspired to complete four years of college. Black girls had the highest aspirations with 71% desiring to finish college. The lowest proportion with this goal were white boys; only 51% wanted to finish college. For all groups, expectations were lower than aspirations.

By high school age, the proportion aspiring to graduate from college dropped remarkably compared to what they wanted when the respondents were in grade school. For black girls, the drop was from 71% at grade school to 27% at high school age. The corresponding drop for white females was from 59% to 14%; for black males, 55% to 29%, and for white males, 51% to 15%.

Over thirty personal, demographic, or parenting factors were found to be associated with the educational goals of children and youth. Among the strongest were occupational aspirations, achievement motivation, academic motivation, and mothers' goals for the child. The correlation coefficient was .60 for the relationship between the high school age respondents' educational aspirations and their perceptions of how far their parents wanted them to go in school.

There was a marked discrepancy between the educational aspirations of the respondents and their actual educational attainments when they were studied as young adults. The largest proportion that had actually graduated from college was 5.4% of the black females. Just a few years earlier, 27% had said their goal was college graduation. The college completion rates were 4.6% for white females, 1.3% for black males and 1.5% for white males and also represented marked discrepancies from their aspirations at younger ages.

It is possible to conclude that the educational aspirations of these low-income youth were unrealistically high; therefore, efforts could be expended to help youth to develop more realistic goals. Yet the evidence is clear that the higher the aspirations at grade school age, the higher the aspirations at high school age, and the higher the actual educational attainment. Discouraging high goals could lead to even lower adult achievement.

Significant Others and Life Plans

The findings of this study suggested that low-income black and white youth from rural areas of the South do not have diversified social networks of SOs. That is, low-income, rural youth tended to restrict their SO choices to mothers, fathers, and the no one category in the areas of marriage and fertility plans.

The frequent selections of parents as SOs, for example, may reflect the strong bonds that purportedly exist between members of low-income Appalachian and rural black families. Several authorities have suggested that youth from these areas of the rural South live in a world revolving around social relations with family members who function as SOs (Beaver, 1982; Ford, 1962; Hicks, 1976; Martin & Martin, 1978). Many advantages and disadvantages may be experienced by low-income black and white youth from close ties with family members who function as SOs. Strong family ties are advantageous because they serve as important menchanisms that provide assistance to family members during times of crisis (Hansen & Hill, 1964). Other benefits include the fact that strong family bonds may provide members with a secure sense of self, a set of mutual obligations, and continuity across generations. In contrast, familistic orientations can be a disadvantage when they discourage young people from contacts beyond the family boundaries with SOs who are capable of providing alternative ideas about life decisions. Thus, strong family bonds may exclude alternative sources of influence by isolation or even alienating youth from constructive sources of information beyond family boundaries. A further indication of this isolation was the frequent selection of the "no one" category for fertility and age of marriage plans. Apparently, this pattern of SO selection reflects the fact that many low-income youth made these decisions privately without assistance from important referents.

These results also suggested several opportunities for the development of interventions to assist low-income black and white youth from the rural South. For example, the strong influence of parents on low-income youth underscored the need for interventions that utilize ongoing socialization processes and provide parents with accurate information about a variety of family issues upon which youth can draw. Family life educators who intervene in this manner will capitalize on the position of parents as important SOs for the life plans of youth.

Other results having important implications involved the fact that many adolescents relied on their own resources (i.e. by selecting the "no one" category so frequently) for marriage and fertility decisions. Because many adolescents do not appear to acquire information in these areas from their immediate social networks, the importance of family life education programs within the school is underscored. Information provided by these programs enhances the ability of youth to assess a greater number of alternatives, increases their self-awareness, and develops more realistic expectations about marriage and family life.

Satisfaction with Life Conditions

The final section of this volume dealt with how the men and women, now in their adult years, felt about their educational experiences. We looked, too, at how satisfied they were with their occupational achievements, their residential locale and living arrangements, their marital relationships when applicable, and with their lives generally.

Educational satisfaction. Over a fourth of the males and about 20% of the females were either somewhat or very dissatisfied with their total high school experience. Other findings suggest that the respondents, in retrospect, were more dissatisfied with their own performances than with the school itself. Thus, 31% of the males and 25% of the females registered dissatisfaction with the advantage they took of the school's offerings and 36% of the males and 32% of the females were dissatisfied with the educational level they achieved. About 77% of the males and 88% of the females registered some degree of satisfaction with the basic academic subjects taught in their high school. From about 60 to 80% of the respondents were either very or somewhat satisfied with the electives offered in their schools, the quality of their teachers, the academic equipment and resources, and the vocational programs. There was less satisfaction with the vocational counseling that was available; still about half of the respondents registered satisfaction with this aspect of their school experience.

The young adults also were asked to evaluate 14 different areas and to assess the degree to which each was a factor in keeping them from getting the education or training they really wanted. The factors that can be considered barriers to further training included family responsibilities (mostly for females), not having enough money for further education, lack of information about opportunities, and the lack of vocational/technical schools or colleges near their homes. On the other hand, a number of factors were perceived to have had little impact on their pursuit of further training or education. These included the respondent's race and sex, intelligence, the personal effort that would be required of them, and parental interest.

Occupational satisfaction. Respondents were asked to assess their overall occupational satisfaction, satisfaction with specific aspects of their present jobs, and barriers they perceived to occupational attainment. They also responded concerning the jobs they anticipated having five years in the future.

About 80% of the respondents registered satisfaction with their occupational experiences and present job. The bulk of those, however, were only somewhat satisfied as opposed to very satisfied. Less satisfaction was reported regarding earnings, with about 40% of the respondents registering some degree of dissatisfaction.

More than three-fourths of the respondents registered some degree of satisfaction with such features of their job as its provision for steady work, its location, the opportunity it provided for helping others, the physical activity it provided, and the interesting nature of the work. In addition, three-fourths of the males, but only 57% of the females were satisfied with the earning potential of their job and 85% of the males, but only 61% of the females were satisfied with the chance to use their minds provided by their jobs.

Using the Cantrill ladder, respondents were asked to rank their present job on a scale from 0 to 9, with 0 indicating the worst possible job for them and 9 the best. The rankings approached a normal distribution with most of the rankings by males occurring between the third and the fifth levels on the ladder and most for females between the third and sixth levels. Most of both sexes were quite optimistic about the future, responding that the job they would have in five years would be close to the best possible one for them.

The young adults also responded to items that might be barriers to attaining the jobs they really wanted. The four areas most often identified as barriers were limited local occupational opportunities, lack of money for vocational/technical education or college, scarcity of jobs nationally, and lack of contacts or not knowing the right people. One half of the females thought that family matters would interfere with their occupational advancement. A third or more saw as barriers the absence of a nearby vocational school or college and the desire not to move away from friends and family. Race, sex, intelligence, schools attended, parental encouragement, and personal effort required for advancement were not perceived as barriers to occupational attainments.

Living arrangements. From 85 to 93% of the respondents were somewhat or very satisfied with regard to their present living arrangements (with parents, with spouse, or alone), the quality of their housing, the community size, and the closeness of their location to their home community. Women were somewhat more satisfied than men with respect to their living arrangements and the size of the community.

Marital happiness. Two-thirds of the respondents rated their marriages as very happy, but about 4% considered their marriages unhappy, another 4% said they were not too happy, and 16.5% checked "just about average". The lowest three of the five rankings on the scale were selected by 24% of the men and 20% of the women.

Implications

Several opportunities for the development of intervention strategies to assist low-income rural youth with their life plans are suggested by these findings. For example, the strong influence of nuclear family members on low-income youth underscores the need for family-focused intervention procedures. To accomplish this, career and family life educators need to shift away from viewing low-income families in terms of deficit models. Instead, interventions must employ ongoing socialization processes and provide family members with accurate information about career, marriage, and fertility alternatives upon which youth can draw.

A possible focus of such interventions is revealed in studies indicating that career information is a topic that parents and adolescents freely discuss with each other (Brittain, 1963; Polson & Jurich, 1980). Parents can be helpful to adolescents because they have experienced various aspects of career exploration including its attendant successes and disappointments. In addition, parents can serve as role models and act as sounding boards for the career explorations of adolescents. Professionals can draw upon the current expertise of parents and provide them with additional career information to assist youth with career explorations.

Contributions to parental knowledge are important interventions because low-income families have limited access to information about career alternatives. This inadequate availability of information is amplified further when low-income youth remain close to their families in rural areas where little occupational diversity exists. Continued residence in rural areas may restrict the number of role models available and limit the access of youth to information about career alternatives (Cosby & Charner, 1978). Furthermore, occupations found in rural areas tend to be more representative of low status occupations.

Because they have frequent contact with rural families, agricultural extension agents and family life specialists from the State Cooperative Extension Services (CES) can be especially helpful in providing career information to the parents of low-income youth. Recently, representatives of CES and the profession of home economics have indicated in a national report that the development of family support systems for low-income families and minority groups should be given high priority (U.S. Department of Agriculture, Science and Education, 1981). Such efforts on the part of CES personnel will take advantage of the parents' positions as the most important significant others for youth.

Parents might be encouraged to use areas in which they have positive interaction with adolescents in creating bridges to other areas of concern (Polson & Jurich, 1980). Using career development as a starting point, professionals can establish a more effective system of communication with the parent-adolescent relationship. Subsequently, adolescents may begin to feel more secure and seek information about other life decisions including marriage and fertility decisions. One outcome of this process is that parents can help the young to view work values within the context of other values affecting the broader scope of their adult lifestyles. In short, work values concerned with "making a living" cannot be considered in isolation from other aspects of "living" (Hoyt, 1984).

Besides the family, educational institutions are important vehicles for dispensing information about career and family options. High school activities and organizations that involve teenagers might be used to disseminate information about educational and employment opportunities. Yet another technique would be to sponsor "career and family days" in which parents and members of the community could speak to groups of students about occupational options and family issues (Kenkel & Gage, 1983). Special activities of this kind might capitalize on the powerful influence of peers and provide opportunities for youth to interact with persons having a variety of perspectives about career and family alternatives. Adults who serve in such capacities might discuss their occupations with pupils, talk about how school subjects relate to their daily tasks, and answer students' questions about the nature of their work settings. In short, young people should be exposed to as many potential significant others as possible. Significant others are important because they often "size up" a young person's potential, communicate expectations, and encourage him or her to pursue certain life endeavors. Significant others use example, rewards, punishments, teaching and reasoning to influence young people (Otto, 1984).

One of the most important implications of these results involving the formal education of youth is the need for the continuing development of career education programs. Large scale interventions of this kind can provide youth with opportunities to see the relevance of what they are learning for their present and future. Effective career education programs enhance the ability of youth to understand and act on the linkages between formal education and the world of work. An important focus of these programs should be an effort to encourage high aspirations which are reflective of realistic objectives. High aspirations tempered by realism may contribute to effective occupational attainment and minimize the frustrations that arise from setting goals that are impossible to realize.

Information provided in career education programs can contribute to the formation of youthful aspirations as the young take stock of their own educational and occupational potentials. In solidifying their aspirations, young people think about themselves--their likes, dislikes, strengths and weaknesses. They also take into account their own mental abilities and academic performances as they develop their aspirations.

Effective career education involves the entire school program and consists of planned experiences beginning in the elementary school years and continuing throughout the formal education of youth. Career education is not packaged as a separate course, but is woven into the content of the existing curriculum. A systematic program of career education provides awareness of available career alternatives, opportunities for exploring a variety of job possibilities and information about the necessary education required to enter a particular vocation. Specifically, outstanding career education programs enhance a) self-awareness, b) basic academic/vocational skills, c) awareness of work values, d) knowledge about work, e) work habits, f) job-seeking and application skills, g) job placement opportunities, and h) awareness of the required educational programs for each position.

Career education cannot be considered in isolation from marriage and family plans. Students should have many opportunities to consider how the interface between roles within work and family settings may enhance or inhibit the quality of life. Because the present results indicated that adolescents tend to rely on their own resources for marriage and fertility decisions (i.e., by selecting the "no one" category so frequently and by not choosing alternative significant others), the importance of family life in conjunction with career education is emphasized. Information provided by these programs might compensate for the minimal support they are getting from their social networks. Similar to career education, family life programs can enhance the ability of the young to assess a greater number of alternatives, increase their self-awareness, and develop more realistic expectations about marriage and family life.

One of the most important elements of career education programs is the need for involvement of youth in the world outside the walls of the school. In short, career education should operate as a total community effort, not simply within the context of the formal system of education. Because educators do not have all the skills, knowledge, or resources needed to equip the young with the necessary work skills and attitudes, expertise must be drawn from business, labor, community service organizations and community youth organizations.

Organizations such as the Girl Scouts, Boy Scouts, 4-H and Junior Achievement also should be encouraged to continue, if not expand, their current career education efforts. In some communities, these programs have close ties with those found in the schools. Elsewhere, career education efforts sponsored by youth organizations operate independently of school systems. Additional components of career education programs should include field trips, cooperative education programs and work-study opportunities that provide students with hands-on experiences in areas relating to their career aspirations.

Parental involvement in career education is a key component of any successful program. Parents should be called on to help determine the types, characteristics, and the extent of their roles in carrying out career programs. In addition, they should help to set up both the policy and the general mechanisms of the program through which policies are carried out.

One method of gaining parental involvement in career education programs is through the development of seminars that help parents to assist their sons and daughters with career choices. Seminars of this kind should provide parents with information about: a) current trends in the labor market, b) information about college versus vocational/technical programs, c) the value and cost of educational programs (i.e. college and vocational/technical programs), d) opportunities for financial aid, and e) how to acquire additional information on career alternatives.

High quality career education programs also address the issue of sex-role stereotyping in career choices. That is, education for vocational pursuits can have an important role to play in combating this tendency by providing information about the variety of career opportunities available for men and women. Information should be provided to female youth about a wide array of work roles that are not limited to those occupations stereotyped as being "appropriate for women" (Kenkel & Gage, 1983). Although sex-role stereotyping often works against women, greater consideration should also be given to its negative effects on men. Career education programs should provide opportunities for boys and girls to experience occupational settings and role models that are nontraditional in character. These efforts are not designed to persuade youth into assuming roles in which they are uncomfortable. Instead, the point is that a wide variety of career and life options should be based upon an individual's ability, motivation and character, rather than the arbitrary basis of gender.

Closely allied with educational programs are systematic career counseling efforts within the schools. The counseling staff within each school should assist students to develop plans (tentative, long-term and alternative) for their career and educational development. A major theme of these interventions should be the interrelationships among career, individual and familial areas of life. That is, recognition should be given that changes in one area affect the quality of life in other areas. Counselors must understand the developmental tasks within each of these dimensions of life.

Expertise of this kind allows counselors to develop interventions that address the interrelationships among the career, individual and family dimensions of life.

An integrated model that focuses on individual, family and career functioning places emphasis on health rather than illness, prevention rather than treatment. Much can be learned from studying young people who lead high quality lives and by applying this information to those encountering more difficult circumstances.

Programs that provide career education, family life education and career counseling also are important vehicles for youth who do not have equal access to economic and social opportunity. Information and skills provided through these interventions provide access to greater competence and a fair share of our society's wealth. Programs of this kind can be especially useful as avenues for remediation and affirmative action for low-income youth, females and minorities.

One of the most hallowed traditions in American society has been the emphasis on "equal opportunity for all". Basically, this idea refers to the right of all people to pursue the educational and occupational goals they choose. In order to accomplish this ideal more effectively, social researchers have focused on the difficulties and inequities faced by minority and low-income youth. These efforts, in turn, have sought to understand the obstacles to social mobility and have attempted to design intervention strategies to remedy these problems. However, when state and federal programs began focusing on the alleviation of the numerous difficulties faced by low-income Appalachians and rural blacks, they often were ineffective. This was the case because many of these programs were based on limited research evidence, were unrealistically expected to provide short-term results, and were designed by professionals who did not fully understand the culture and family dynamics of low-income Appalachian and black youth from the rural South. In addition, recent federal and state cutbacks in funding for research and intervention programs have prevented rapid progress in these areas.

Greater knowledge about the social psychological processes that influence the expectations, aspirations and behavior of low-income youth should lead to effective interventions with low-income, rural youth. It is hoped that the results of this study have provided insights that social agents might use to create or strengthen programs that will help low-income, rural youth to deal realistically with the obstacles they face and to utilize their talents and abilities more effectively. A closer approximation to the ideal of "equal opportunity for all" will be accomplished in our society when low-income Appalachian and rural, black youth are provided opportunities and encouragement to pursue a wider range of educational and occupational goals.

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APPENDIX A
Description of Instruments*
Survey Forms for the Three Phases of the Longitudinal Study
1969, 1975, and 1979

by

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*Copies of the questionnaires used in this longitudinal study are available in a separate publication from the Tennessee Agricultural Experiment Station, Research Report 86-12. Only summary information about items and their sources is included in this appendix. Additional information about instrument selection and/or development is available in Southern Regional Technical Committee for Family Life (Southern Regional Project S-63) (1974). Research Report-- Baseline and Experimental Phases (Information Series II). Lexington, KY: Agricultural Experiment Station, University of Kentucky.

Description of the Instruments

The initial questionnaire, pretested and revised by the participating states, was administrated in 1969 in classrooms by two-person teams. In 1975 similar procedures were followed, combined with instructions on how to follow-up those students who were no longer in school and/or who had left the community. In 1979, a mail questionnaire procedure was used. Five survey forms and a supplement were used for the three phases of the longitudinal study reported in this bulletin:

1. Survey of Student Plans for Work and School (Baseline Phase, 1969)

2. Mother's Survey of Occupational and Educational Goals for Children (Baseline Phase, 1969)

3. Survey of Youth Plans for the Future (Follow-up Form, 1975) (This included supplemental questions for youth not in school)

4. Survey of Mother's Occupational and Educational Goals for Children (Follow-up Form, 1975)

5. Ten-Year Follow-Up Survey of Young People (1979)

The "Survey of Student Plans for Work and School" (for fifth and sixth graders) included questions relating to educational and occupational aspirations and expectations, academic (Elder, 1962) and achievement motivation (Weiner, in McClelland et al., 1953), independence training (Elder, 1962), self-concept (Lipsett, 1958), and the child's perception of the mother's behavior (Bronfenbrenner, 1960; Siegelman, 1965, 1966). The interview form, "Mother's Survey of Occupational and Educational Goals for Children", included questions on educational and occupational aspirations and expectations in terms of what the mother desired for her child, achievement values (Rosen, 1964), anomia (Srole's Scale, in Bonjean, 1967), and characteristics that the mother valued most in her child (Kohn, 1969). The other three forms used in 1975 and 1979 repeated items from the first two forms and included additional items appropriate to the age group being surveyed. Table A.1 is used to summarize the components of the six survey forms and to show the groups of questions asked during the various time periods.

The components of the various instruments will be discussed briefly in terms of their original appearance in the literature, their planned contributions to the study, and any adaptations to their wording or administration that were introduced. The sections describing the instruments are arranged in the same order as they are presented in Table A.1.

Occupational and Educational Aspirations and Expectations

The occupational plans of grade school youth (1969) were measured by two questions. The first read: "If you could choose any job you wanted, what kind of job would you really like to have when you grow up?" Responses to this question were defined as occupational aspirations. A second question asked: "What kind of job do you think you really will have when you grow up?" Responses to this question constituted the operational definition of occupational expectations. In 1975 and 1979 the same

Table A.1. Summary of Instrument Variables Measured by Items for Three Phases of the Longitudinal Study

	Baseline 1969		Youth Follow-up 1975		10 Year Follow-up 1979
Instrument Variables	Children(1)	Mothers(2)	Youth(3)[a]	Mothers(4) (subsample)	Young Adults(5)
Aspirations and Expectations (OCC) (ED) (MOC) (MED)					
Occupational	V40,W11	Q38,Q67	K40,L11	D38,D67	DD36,DD65
Educational	X55,X56	Q71,Q72	M55,M56	D71,D72	DD68,DD69
Likelihood of Attainment		Q41		D41	
Perceived Barriers to Attainment			L44-L52		
Things Important about Job			L53-L59		
Significant Others for Jobs	W14-W23		L14-L23		EE10-EE18
for Education	X57-X66		M57-M66		
for Age at Marriage			A30-A39		
for Fertility Plans			A40-A49		
for Personal and Family Matters					EE19-EE27
Academic Motivation	AC		AC2		
and Achievement Motivation	ACHM				

(table continues)

	Baseline 1969		Youth Follow-up 1975		10 Year Follow-up 1979
Instrument Variables	Children(1)	Mothers(2)	Youth(3)[a]	Mothers(4) (subsample)	Young Adults(5)
Self-Concept	SEL U28-U30 U32-U49				EE52-EE58
Child's Report of Mother's Communication (Independence Training)	IND T48-T52				
Mother's Behavior as Perceived by the Child (Loving, Demanding, Punishing)	LV,DM,PU				
Intellectual ability	IQ				
Parental Values (Characteristics of Children that Mothers Value)		CHA,OUT			
Achievement Value Orientation		ACV		ACV2	
Alienation or Anomie		ANO		E11-E23	EE40-EE51
Locus of Control			PXC,GXC A61-A71		
Demographic and Family Background		FBK,HOZ, NOH,WEL, MOG	FBK2.........	WEL2	All (where living) A22 (number children)

(table continues)

	Baseline 1969		Youth Follow-up 1975		10 Year Follow-up 1979
Instrument Variables	Children(1)	Mothers(2)	Youth(3)[a]	Mothers(4) (subsample)	Young Adults(5)
Family Social Participation		SOC		SOC2	
Self-Reported High School Grades			GPA,GTY		
Schooling, Work, and Salary History					AA23-AA72
Jobs Held					BB10-BB23
Unemployment, Reason					BB25,BB27
Income Self, Spouse Sources					BB28,BB29 BB30-BB38
Job Search Patterns					BB40-BB54
Barriers to Desired Job			L44-L52		BB55-BB71
Importance of Job Aspects			L53-L59		
Work Experience			L60-L63		
Job Satisfaction					
Individual Aspects					CC26-CC36
With Job Overall, Money, Work Experience					CC37-CC42
Present, Future					CC43,CC44

(table continues)

	Baseline 1969		Youth Follow-up 1975		10 Year Follow-up 1979
Instrument Variables	Children(1)	Mothers(2)	Youth(3)[a]	Mothers(4) (subsample)	Young Adults(5)
Educational Attainment					BB72
Still in School					BB73
Barriers to Aspired Level					CC10-CC25
Educational Satisfaction					
With Attainment					CC45
Individual Aspects					CC46-CC56
With Education Overall, Own Performance					CC57,CC58
Educational Encouragement from Parents					CC59
Life Satisfaction					
Past, Present, Future					CC67-CC69
With Outcomes, Critical Events					EE35,EE36
Residential Preference					
Area, Type (Present, Future)			A23,A24		AA11,AA12 EE33,EE34
Satisfaction					AA63-AA66

(table continues)

	Baseline 1969		Youth Follow-up 1975		10 Year Follow-up 1979
Instrument Variables	Children(1)	Mothers(2)	Youth(3)[a]	Mothers(4) (subsample)	Young Adults(5)
Household Composition					AA13
Attitude about Married Women Employed Outside Home			A50		EE39
Significant Others for these Attitudes			AA51-AA60		
Marriage/Children					
Predicted/Actual Age of Marriage			A25		AA19-AA20
Present Status			A27		AA14
Marital Happiness					CC62
Number Children (have and desire)			A28,A29		AA22

(table continues)

	Baseline 1969		Youth Follow-up 1975		10 Year Follow-up 1979
Instrument Variables	Children(1)	Mothers(2)	Youth(3)[a]	Mothers(4) (subsample)	Young Adults(5)
Supplemental Questions for Youth Not-in-School[b]					
School Dropout, Reasons			C9-C10		
Age Quit School			C11		
Grade Finished, When Quit			C12,C13		
Person(s) Consulted			C14-C23		
Activities Since Dropping Out					
Actual, General and			C24		
Specific Aspects			C25-C38		
Desired			C39-C40		
Plans If Not Actual			C41		

Note. Acronyms or variables appear in the column indicating the phase in which data were collected. Refer to Table B.1 for brief description of variables, scoring of items for the variable and means and standard deviations.

[a] Aspirations are listed first in the sequence followed by expectations.

[b] Information about youth not in school.

questions were posed; however, "when you grow up" was changed to "in the future" in 1979.

The job choices for both occupational aspirations and expectations were given a double digit occupational prestige score. This scale, ranging from 20-100, measures the relative prestige of occupations. This measure was developed by NORC (National Opinion Research Center) using a national sample of respondents who were asked to judge 90 occupations according to a five point scale with values from 20 = poor to 100 = excellent (Reiss, 1961). Occupational choices were also categorized according to the nine-point Census classification system, which ranges from professional-technical (1) to laborer (9). Occupational Plans, OCC, is a composite measure constructed by using the mean score obtained from combining responses about occupational aspirations and expectations. This measure was intended to reflect a balance between individuals' dreams and sense of reality with respect to their occupational futures.

The educational plans of grade school children were measured by two questions. "How far would you like to go in school?" measured educational aspirations. "How far do you think you will really go in school?" measured educational expectations. The responses were coded in categories ranging from finish 8th grade to finish college and beyond with various intermediate combinations including trade schools, junior or community colleges, etc. Educational attainment was a measure of the educational level reached by the respondents as of 1979.

Significant Others (SO's)

Three items were used to identify the SOs who influenced the occupational plans of the low-income youth. During each of the three data collection phases respondents put a check by each person who had talked to them and was important for advice about their job plans. Possible SO choices for these items included "mother", "father", "older sibling", "other relatives", "teachers", "peers", "someone else" and "no one". In the 1979 early adulthood phase "spouse" was added. Two items included only in the high school (1975) data collection phase made possible the identification of SOs for marriage and fertility plans. Youth were asked to identify who had something to do with their ideas about when they should marry and how many children they would like to have.

Academic and Achievement Motivation

"Academic liking" was the variable representing a combination of items on academic and achievement motivation. Five of the academic motivation items had been used by Elder (1962). A sixth item was added by the regional committee to assess willingness to attend school if allowed to have one's way. The scale included such items as: "I am interested in my school work", "I really try to get good grades", and "I study or read at home". The Likert-type responses for each item ranged from always to never. Items to measure achievement motivation were used to ascertain the child's overall motivation in contrast or in addition to his motivation to achieve academically. Although Smith (1969) reported using a similar type of measurement, studies using Weiner's (in McClelland, 1953) 20-item scale (copy obtained from Bernard Weiner, the originator) were not available in 1969. The items were factor analyzed and the six items determined to be conceptually consistent in measuring academic motivation were combined with four achievement motivation items to make one score which was titled Academic Liking (AC).

Self-Concept

The scale used to measure self-concept, developed and reported by Lipsitt (1958), consisted of 22 descriptive words or phrases which the respondents checked according to how well they believed the items described the way they felt about themselves. Before choosing the Lipsett scale it was pretested along with other instruments; these other instruments proved too difficult for the target population. Because the Lipsett items had been used successfully by other researchers with 5th and 6th graders, it was the one selected. Some items were slightly modified or amplified as an aid to a child's understanding (parenthetical descriptions were added to 10 items) and the item "brave" was omitted.

In 1975 self-concept was not measured; however in 1979 rather than use the 22 Lipsett items designed for grade school children, only 7 items were used. These had been used successfully in the National Longitudinal Study of the High School Class of 1972 (National Center for Education Statistics, 1978). Respondents read the statements and checked either "agree strongly", "agree", "disagree", or "disagree strongly".

Child's Perception of Mother's Degree of Communication and Independence Training

This five-item scale was adapted from questions used by Elder (1962) with junior and senior high students. Elder stated that a Guttman scale analysis indicated that the responses should be dichotomized and thus scored 0 and 1. Because it was believed that the question and some of the responses to be checked were too complicated for 5th and 6th graders, items were pretested extensively. Pretest analysis led the committee to change questions and response modes to be more consistent with the type used on the Bronfenbrenner scale (Devereux, et al., 1962) because it was assumed the sample children could follow that format more easily. This example shows how items were changed:

> Original Elder item:
> When you don't know exactly why your mother is going to punish or discipline you, will she explain the reason to you? (Always, almost always, usually, sometimes, very seldom)
>
> Changes used:
> When she punishes me she tells me why, if I don't know. (Always, most of the time, sometimes, hardly ever, never)

Four of the five questions dealt with use of explanation, reasoning, and "talking about". Elder labeled these items "independence training" based on the reasoning that the more a mother explains, reasons, and talks about decisions with her child, the more likely it is that the child is being prepared for the responsibilities of adult life. Other investigators (Winterbottom, 1958; Chance, 1965; Coopersmith, 1967) have used this term with other connotations and different questions. Therefore, a more operational definition for the five items was "degree of verbalization" or "degree of communication". The acronym COM was used to emphasize this element of verbalization.

Mother's Behavior as Perceived by the Child

The 45-item Bronfenbrenner Parent Behavior Questionnaire (Devereux, et al., 1962) was used to assess the mother-child relationship as perceived by the child. In many studies longer instruments have been used, but the regional committee thought that the Bronfenbrenner instrument was sufficient, since aspects of mother-child relationships was only one of many such aspects being explored. Analysis indicated some strong inter-item relationships, so the instrument appears to have been a good choice.

Devereux, Bronfenbrenner, and Suci (1962) published the first report on the use of these 45 questions; and Devereux, Bronfenbrenner, and Rodgers (1969) published a second cross-cultural study based on its use. Siegelman (1965, 1966) reported the factor analysis on which components used in this study were based. The instrument is described briefly in Johnson and Bonmarito (1971).

Siegelman's three factors (Loving, Demanding, Punishing) were used in the present analyses. Originally there were fifteen clusters of three items each. A factor analysis of the responses of the 1412 children involved in this study showed essentially the same three groupings as Siegelman had found. Siegelman (1965) defined the three factors as follows:

> Factor I: "Loving" depicts a parent who is readily available for counsel, support, and assistance. This parent enjoys being with his child, praises him, is affectionate, concerned, and has confidence in him.
>
> Factor II: "Punishment" shows the greatest amount of consistency on the scale factor loadings. This factor characterizes a parent who often uses physical and nonphysical punishment with little concern for the feelings and needs of his child, and frequently for no apparent reason. Although rejection or hostility by the parent is not explicitly noted in the items, it is strongly suggested.
>
> Factor III: A controlling, demanding, protecting, and intrusive parent is depicted in "Demanding". This parent insists on high achievement, explains to his child why he must be punished when such discipline is necessary, and becomes emotionally upset and distant when the child misbehaves.

Intelligence Quotient

The 1967 edition of the Otis-Lennon Mental Ability Test, Elementary II level, Form J, was used to measure subjects' IQ. Otis and Lennon reported validity coefficients ranging from .60 to .80.

During pretesting sessions of the Otis-Lennon test with children the same ages as the survey children, answer sheets suitable for machine scoring were used. Based on that experience it was determined that individual test booklets would be easier for the children to use. The test was administered and scored according to instructions in the manual.

In this test DIQ means "Deviation IQ" based on comparison with chronological age of the standardized group. A chart in the manual shows percentiles and stanines along with the following range of scores: 128 and above (4%) Superior; 112-127 (19%) Above Average; 88-111 (54%) Average; 72-87 (19%) Below Average; 71 and below (4%) Low. In this project the child's DIQ score was used in helping decide whether the child understood the other instruments adequately enough to have their data retained in the study. The score itself was used as the study's measure of mental ability.

Parental Values--Characteristics of Children Valued

The mother was presented 16 brief statements concerning characteristics of children; she was asked to select the three that she thought were the most important for a child her own child's age. In a factor analysis of the items one of the factors, CHA, was defined as "Mother wants her child to have character". Another factor, OUT, was defined as "Mother emphasized an outgoing child". These two variables are based on Kohn's Parental Values scale (Kohn, 1969).

Mother's Achievement Value Orientation

Items measuring mother's achievement value orientation were compiled and modified from various sources, primarily Rosen (1964). In the questionnaire they were interspersed with the Srole anomia statements (Bonjean, 1967). "Disagree" was the appropriate achievement value response. Rosen (1964) used nine achievement items in a study in which both the mother and the her son (age range from 7 to 14) were asked the questions. In a pretest of these items with 5th and 6th graders in a classroom setting, it was found that the items were too difficult for the children to comprehend and answer reliably; therefore, the items were used only in the questionnaire for mothers. Achievement Value Orientation is a scale of seven of Rosen's nine items determined to be conceptually consistent through a factor analysis procedure. The young adults responded to these items in the 10-year follow-up to assess the degree to which a respondent agreed or disagreed with a series of statements representing beliefs about what is necessary to be occupationally successful in today's world. "A good son would try to live near his parents even if it means giving up a good job in another part of the country" is an example of an item used in this scale.

Alienation or Anomie

The anomie items were modified from Leo Srole's Anomia Scale as described by Bonjean (1967). The wording in some statements was revised in an attempt to make the items easier for the mothers to comprehend; however, even after revision the items still seemed difficult to administer. These items were interspersed among the mother's achievement value items. The appropriate anomic response by the mother on these items was "agree". The project statistician used the scoring method described in Miller and Butler (1966) as a reference.

Locus of Control

A modified, shortened version (11 items) of Rotter's Internal-External Locus of Control scale (Rotter, 1966) was used in 1975. For each item, respondents chose one of two statements that best described their views.

Example items: (41)"What happens to me is my own doing" or "Sometimes I feel that I don't have enough control over the direction my life is taking"; and (42)"When I make plans, I am almost certain that I can make them work" or "It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow".

Family Background and Social Participation

Family Background is composite socioeconomic status based on the breadwinner's occupation, the level of education of the respondent's mother and father, and a six-item measure of social participation (voter registration and voting behavior, church attendance, memberships in organizations, frequency of watching news on television and reading the newspaper).

Work Experience and Job and Salary History

Work experience in 1975 represented the extent to which the youth had summer fulltime jobs, parttime jobs (summer or through the year), fulltime other than just summer work, and nonpaying work such as volunteer activities. If respondents had had more than one kind of experience, they listed those done most often, next most often, etc. In 1979, seven items provided information on job and salary history. For each year between 1975 and 1979, the respondent checked items listed that described the things they were doing during the 5-year interval in 10 categories. These included schooling (high school, graduate or professional, vocational or academic courses at two- or four-year colleges); full, parttime or self-employment; active duty in the Armed forces; homemaker; unemployemnt for various reasons; and working without pay (such as parents, relative, others, etc.) Other items assessed the following: name of job or type of work; reasons for unemployment; and amount of money made and sources of that income.

Job Search Patterns and Barriers

Respondents checked either "often", "sometimes" or "never" for the methods they had used from 1975-1979 in looking for or getting jobs. The 14 categories included such methods as state and private employment agencies, community action or welfare groups, media sources, telephoning and visiting places without knowing of availability, asked by employer to work, union registration, social networks (parents, relatives, friends, teachers), school or college placement service, and application for government jobs or military service.

Barriers to the attainment of desired jobs were listed in 16 categories and respondents checked how much ("very much", "some", "very little") those things kept them from getting the jobs they really wanted. In 1975, respondents checked how much they thought eight of the barriers might keep them from getting the jobs they would really like. These items included not enough money for schooling desired, lack of job information and good job opportunities, race, sex, intellectual ability, schools attended, and not wanting to move away from family and friends. In 1979, these areas were added: lack of the chance to develop leadership qualities, lack of parental interest and encouragement, scarcity in the amount of good jobs, no accessible vocational/technical schools, no personal contacts, effort required to find the right job, interference of family responsibilities, and anything else the respondent may have perceived as a barrier.

Importance of Job Aspects and Job Satisfaction

In 1975 the youth were asked to pick the job they would most like to have and to select "extremely important", "important", or "not very important" in response to seven items describing aspects of that job. Items included such aspects as offers chance to make a lot of money, gives a chance to be an important person, gives steady employment, etc. In 1979, three additional items (in a location liked, gives amount of physical work liked, and gives chance to use mind) were included and the list was used to measure job satisfaction. The response modes were "very satisfied", "somewhat satisfied", "dissatisfied", and "not important to me". Respondents also indicated their degree of satisfaction with their job as a whole, the amount of money they were making, and their work experience as a whole since being out of school.

A final measure of job satisfaction used the Cantril Ladder Technique (Cantril, 1965). A picture of a ladder was shown in the questionnaire booklet with the directions that the top of the ladder represented the "best possible job for you in the long run", and the bottom represented the worst possible job. The question asked: "At what step on the ladder would you put your present or usual job and the job you think you will have five years from now?"

Educational Attainment and Barriers to Aspired Level

Educational attainment (1979) was assessed by how far the respondent had gone in school. The response modes used were the same as those used in earlier phases when the question asked how far the person wanted or expected to go in school. The respondents was also asked to list all education or training they had had in addition to the level of attainment checked, such as short courses, on-the-job training, etc.

The checklist for determining barriers to educational attainment included the same items as those used for the question on job barriers, in reference to education or training rather than jobs (Refer to the previous section about job search patterns and barriers.). Respondents checked how much the barriers kept them from getting the education or training they wanted.

Educational Satisfaction and Encouragement from Parents

Satisfaction with education was measured with four items including satisfaction with how far they had gone in school as well as satisfaction with their overall high school education and how they had taken advantage of what their high school offered. A checklist allowed the respondent to indicate degree of satisfaction or dissatisfaction with various aspects of their high school experience. These components ranged from the school's offerings in basic academic subjects, vocational and technical programs, elective courses, and practical work experiences to quality of the teachers, educational/vocational counseling, attention to individual needs, and provisions for extra-curricular activities, equipment and library/media resources. In another item the respondents indicated how much education their parents had encouraged them to get when they were growing up. Possible responses ranged from urgings to finish high school and go beyond to expressions of the advantages of going to work or never saying much about the topic at all.

Life Satisfaction

Life satisfaction (1979) was measured using the Cantril Ladder Technique (Cantril, 1965). A picture of a ladder was drawn in the questionnaire booklet with the directions that the top of the ladder represented the best possible life and the bottom represented the worst possible life. The respondents were then asked where on the nine rungs of the ladder they stood at the present time. Similar questions asked them to evaluate where they stood in the past (five years ago) and in the future (five years from now). Respondents were also asked to think back to 1975 and their life plans at that time, and to indicate if things were working out better, about the same or worse than they had hoped. A final question asked if any major happenings in their life, or their family's life, had caused them to change their educational or job plans in an important way.

Residential Preference and Satisfaction/Household Composition

In 1975, residential preference questions asked the youth where they would really like to live in the future. Responses included such areas as in or very near their home community, somewhere else in the state, in another state, in a different part of the USA, or in some other country. Respondents also indicated whether they would rather live in the country, in a town, or in a city. In 1979, two similar questions documented their present situation and another two ascertained their preferences for the future regarding where and in what size community they would want to live. Another question assessed how satisfied they were with aspects of their living situation--closeness to where they grew up, community size, quality of their housing, and their living arrangement (alone, with others, etc.). Household composition was determined through responses to a checklist of people with whom the respondent lived.

Attitudes and Significant Others about Married Women's Employment

In 1975 and 1979 respondents checked the one statement that came closest to describing their thoughts about what a married woman should do about working outside the home. In addition in 1975 the youth were asked to check all the people who influenced their ideas about married women working outside the home.

Marriage/Children

In 1975 and 1979 if respondents had not already married they were asked to indicate their predicted age at time of marriage. Both marital status and actual age of marriage were recorded in 1979. During both phases, the respondents were asked how many children they desired and how many they had, if any. Marital happiness was assessed in 1979; response categories ranged from "very happy" to "unhappy".

Supplemental Questions for Youth Not-in-School

Youth who were not in school in 1975 were contacted individually. They answered the full questionnaire plus a supplement which included items about the following: whether they had quit school for good or would probably go back, main reasons (and additional reasons) for dropping out of school, age and grade finished when quit school, and those with whom they talked before making up their minds to quit. Another series of questions asked what they were doing at the time of the interview regarding job searching, taking special training, helping others with their work, or other things. They also responded to an open-end question about what they would like to be doing and how different that was from what they were actually doing or had planned to do. An additional open-end question asked for anything they had in mind about their plans that might be helpful to those interested in how young people think about their future.

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APPENDIX B
Summary Information on Variables

Table B.1 Acronyms, Brief Descriptive Information and Scoring on Baseline Phase Variables

Acronym	Brief Description	Scoring and Range of Scores[a]		Males		Females	
				Mean	S.D.	Mean	S.D.
	Aspired and expected occupation based on NORC-transform scores	Mean of NORC scores					
OCC	(1)[b]	2.50	7.00	66.74	10.97	70.75	7.59
V40	CH OC ASP (1)	41.00	93.00	68.78	12.01	71.65	8.60
W11	CH OC EX (1)	41.00	93.00	64.89	12.26	70.03	8.74
OC2	HS OCC (2)	43.00	89.00	64.21	9.31	69.04	7.39
K40	HS CH OC ASP (2)	37.00	89.00	67.20	11.13	71.57	7.96
L11	HS CH OC EX (2)	36.00	89.00	61.23	10.20	66.51	9.54
OC3	ADULT OCC (3)	28.00	89.00	65.63	10.11	67.64	8.88
DD36	ADULT OC ASP (3)	28.00	96.00	68.01	11.03	70.41	9.47
DD65	ADULT OC EX (3)	28.00	89.00	63.30	11.18	64.52	9.87
	Aspired and expected educational plans	Mean of coded levels of educational plans					
ED	(1)	1.00	7.00	5.65	1.42	5.70	1.34
X55	CH ED ASP (1)	1.00	7.00	5.85	1.59	6.00	1.44
X56	CH ED EX (1)	1.00	7.00	5.45	1.59	5.40	1.52
ED2	HS ED (2)	1.00	8.00	5.22	1.58	5.01	1.57
M55	HS CH ED ASP (2)	1.00	8.00	5.64	1.64	5.54	1.56
M56	HS CH ED EX (2)	1.00	8.00	4.80	1.86	4.49	1.87
ED3	ADULT ED (3)	1.00	8.00	5.01	2.17	5.34	2.06
DD68	ADULT ED ASP (3)	1.00	8.00	4.45	2.52	4.80	2.47
DD69	ADULT ED EX (3)	1.00	8.00	5.58	2.53	5.88	2.47

[a] range = actual minimum and maximum scores of the entire sample
[b] Number in ( )'s = the testing phase at which the item was used

(table continues)

Acronym	Brief Description	Scoring and Range of Scores[a]		Males Mean	Males S.D.	Females Mean	Females S.D.
	Academic motivation (includes "liking" school)	Total of child's composite score on Elder Achievement Motivation Scale and school-liking portion of Weiner Achievement Motivation Scale (adjusted so high score is high motivation)					
AC	ACADEMIC LIKING (1)	10.00	46.00	29.77	5.37	28.44	4.07
AC2	HS ACADEM LIKING (2)	11.00	37.00	25.84	5.47	32.28	4.31
	Mother's aspired and expected levels of education for child	Mean of coded levels					
MED	(1)	2.50	7.00	5.68	1.12	5.56	1.11
Q71	MO ED ASP (1)	1.00	7.00	5.97	1.51	5.82	1.56
Q72	MO ED EX (1)	1.00	7.00	5.25	1.49	5.15	1.41
MED2	MO HS ED (2)	2.50	8.00	5.48	1.32	5.47	1.37
D71	HS MO ED ASP (2)	1.00	8.00	6.19	1.41	6.02	1.42
D72	HS MO ED ASP (2)	1.00	8.00	4.72	1.68	4.83	1.72

(table continues)

Acronym	Brief Description	Scoring and Range of Scores[a]		Males		Females	
				Mean	S.D.	Mean	S.D.
	Mother's aspired and expected occupation for child, based on NORC-transform scores	Mean of total NORC scores					
MOC	(1)	40.00	89.00	70.37	9.50	71.16	5.60
Q38	MO OC ASP (1)	42.00	93.00	76.23	10.83	72.70	6.02
Q67	MO OC EX (1)	33.00	89.00	64.81	11.72	70.01	6.78
MOC2	MO HS OCC (2)	34.00	95.00	66.77	9.06	68.80	6.69
D38	HS MO OC ASP (2)	34.00	95.00	71.36	10.87	71.71	6.08
D67	HS MO OC ASP (2)	34.00	95.00	61.93	10.36	65.83	9.79
	Self-concept score	Scored so high total represents high self-concept					
SEL	(1)	35.00	87.00	65.12	8.94	67.77	8.61
SEL(3)	SELF CONCEPT (3)	0.29	4.00	2.96	.54	2.96	.54
	Child's report of mother's communication (Elder's modified independence training items)						
IND	(1)	0.00	5.00	3.52	1.33	3.79	1.25

(table continues)

Acronym	Brief Description	Scoring and Range of Scores[a]		Males		Females	
				Mean	S.D.	Mean	S.D.
	Child's perception of loving, demanding, and punishing behavior by mother from BPB[a]	Sum of scores (adjusted so high score means high punishing)					
LV	(1)	31.00	84.00	65.12	8.44	67.95	7.07
DM	(1)	22.00	70.00	50.20	8.46	52.16	7.11
PU	(1)	12.00	60.00	31.55	9.46	30.38	10.77
	Mother's preference for child with character and outgoing traits- based on choices from Kohn's 16 characteristics	Preponderance of choices					
CHA	MO WANTS CHARAC (1)	0.00	3.00	1.20	0.76	1.14	0.79
OUT	MO WANTS OUTGOING (1)	0.00	3.00	0.93	0.69	0.95	0.71
	Otis-Lennon Mental Ability Test (1967) score	DIQ score					
IQ	OTIS-LENNON (1)	57.00	129.00	90.57	13.39	92.93	13.59
	Mother's achievement value score	Total score (weighted)					
ACV	MO ACHIEV MOTIV (1)	16.00	32.00	27.24	4.42	26.95	4.31

(table continues)

Acronym	Brief Description	Scoring and Range of Scores[a]		Males		Females	
				Mean	S.D.	Mean	S.D.
	Indicator of mother's anomia based on five Srole items	If 3 or more items in anomic direction scored 1, otherwise scored 0					
ANO	MO ANOMIE (1)	0.00	9.00	0.70	1.24	0.85	1.42
	Barriers to educational and occupational attainment						
IRP	INFO RGT PEOPLE (3)	1.00	3.00	1.66	0.48	1.68	0.51
PP	POOR PARN (3)	1.00	2.80	1.45	0.42	1.57	0.53
VOC	NO VOC (3)	1.00	3.00	1.35	0.52	1.42	0.63
ME	MY EFFORT (3)	1.00	3.00	0.47	1.00	1.29	0.48
FR	FAM RESP (3)	1.00	3.00	1.24	0.43	1.79	0.80
RCSX	RACESEX DISC (3)	1.00	3.00	1.10	0.23	1.18	0.37
PSCH	POOR SCHLS (3)	1.00	3.00	1.29	0.49	1.29	0.50
M	NO MOVE (3)	1.00	3.00	1.38	0.52	1.56	0.70
NS	NOT SMART (3)	1.00	3.00	1.24	0.45	1.35	0.56
SVO	Imp factors JB CHOICE (3)	-4.00	4.00	-0.19	1.37	-1.35	1.24
RSL	SEES DISCRIM (3)	1.00	3.00	1.75	0.48	1.72	0.49
LCK	LACKS MONEY INFO (3)	4.00	11.00	6.97	1.60	7.17	1.72

(table continues)

Acronym	Brief Description	Scoring and Range of Scores[a]		Males		Females	
				Mean	S.D.	Mean	S.D.
	Educational and occupational attainment and satisfaction						
DPUT	DROPOUT (2)	0.00	1.00	0.18	0.39	0.20	0.40
BB73	STILL IN SCHOOL (3)	1.00	2.00	1.16	0.37	1.13	0.33
BB72	ATTAIN ED (3)	0.00	9.00	5.33	1.58	5.34	1.58
EES	ELECTIVE ED SAT (3)	1.00	4.00	2.79	0.68	2.83	0.70
CC46	SUBJECTS SAT (3)	1.00	4.00	3.00	0.81	3.26	0.73
CC59	MY ED SAT (3)	1.00	4.00	2.76	0.88	2.99	0.83
CES	CORE ED SAT (3)	1.00	4.00	2.68	0.73	2.75	0.71
ATOC	ATTAIN OC PRESTIGE (3)	28.00	76.00	50.15	12.95	56.93	8.02
JBSAT	SAT WITH JOB (3)	0.21	4.25	2.53	0.93	2.47	0.93
	Life satisfaction						
GSAT	GENERAL SATISFACTION	0.80	6.60	4.22	0.99	4.61	0.96
	Family background						
FBK	FAMILY SES (1)	67.00	233.00	134.36	23.07	131.96	23.10
FAED	FA ATT ED (1)	1.00	19.00	8.35	2.89	8.15	2.79
MOED	MO ATTAIN ED (1)	1.00	19.00	9.19	2.47	9.03	2.55
FAMD	FAMILY JOB PRESTIGE (1)	25.00	83.00	54.26	10.27	54.50	9.75
SOC	SOCIAL PART SCORE (1)	0.00	18.00	13.32	3.44	12.52	3.58
FBK2	HS FAMILY SES (2)	79.00	231.00	136.25	21.64	135.80	23.07

(table continues)

Acronym	Brief Description	Scoring and Range of Scores^a		Males		Females	
				Mean	S.D.	Mean	S.D.
	Residential preference						
AA11	WHERE LIVE (3)	1.00	4.00	1.60	0.91	1.47	0.83
AA12	HOW CLOSE (3)	1.00	4.00	1.38	0.73	1.43	0.70
ATCOS	ATTAIN COSMOP LIFE (3)	0.67	3.00	1.28	0.58	1.4170	0.5107
CSP	LIKE COSMOP LIFE (3)	3.00	78.00	27.93	6.23	24.74	4.45
	Household						
HOZ	(1)	2.00	15.00	6.42	2.30	6.33	2.58
HOZ2	HS HOUSESIZE (2)	1.00	9.00	5.31	1.87	5.46	1.89
AA13	WITH WHOM (3)	1.00	6.00	2.85	1.36	2.74	1.08
	Husband in household						
NOH	NO HUS (1)	0.00	1.00	0.13	0.33	0.12	0.32
NOH2	HS NO HUSB (2)	0.00	1.00	0.14	0.35	0.19	0.39
	Welfare status						
WEL	GOVT AS INCOME (1)	0.00	3.00	0.20	0.69	0.33	0.84
WEL2	HS GOVT INCOME (2)	0.00	15.00	0.87	1.87	0.78	1.19
	Grades						
GPA	GENERAL GRADES (2)	70.00	115.00	91.51	10.94	96.50	12.05
GTY	GRADES THIS YEAR (2)	85.00	145.00	116.15	18.52	118.18	22.51

(table continues)

Acronym	Brief Description	Scoring and Range of Scores[a]		Males		Females	
				Mean	S.D.	Mean	S.D.
	Locus of control						
PXC	PERSONAL LOCUS CONTROL (2)	3.00	6.00	4.10	0.84	4.02	0.81
GXC	GENERAL LOCUS CONTROL (2)	8.00	16.00	10.78	1.66	10.62	1.62
	Sought job information from significant others						
JB	TALKED JOB (1)	1.00	7.00	2.47	0.64	2.45	0.61
MOTK	CH MENTION MO (1)	0.00	2.00	1.37	0.69	1.60	0.64
FATK	CH MENTION FA (1)	0.00	2.00	1.20	0.83	1.02	0.81
	Job search techniques						
HRS	USED MEDIA JO SEARCH (3)	0.00	4.00	0.75	1.15	0.87	1.11
INS	USED NETWORK (3)	-2.00	2.00	0.03	1.10	0.32	1.06
RHJ	USED RELATIVES (3)	0.00	5.00	0.67	0.68	0.60	0.64
	Mother's age						
MOG	MO AGE (1)	26.00	7.00	38.62	7.40	38.21	7.75
	Demographics						
GR	FIFTH OR SIXTH (1)	1.00	2.00	1.54	0.50	1.52	0.50
FST	FIRST BORN (1)	0.00	1.00	0.30	0.46	0.31	0.46
AA14	MARITAL (3)	1.00	4.00	1.44	0.58	1.73	0.61
AA22	NO OF CHILD (3)	1.00	4.00	1.26	0.48	1.42	0.62
BB28	SELF INC (3)	1.00	7.00	3.88	1.42	3.17	1.23
BB29	SPOUSE INC (3)	1.00	7.00	2.89	1.61	4.43	1.34
BLKRCE	BLACK RACE SCORE (3)	0.00	1.00	0.38	0.49	0.32	0.47

APPENDIX C
Research Procedures Manual
1975

* * *

The general outline of the interviewer's manual was adapted from similar manuals used in Projects S-48, S-48R conducted by the Southern Regional Technical Committee for Family Life. Procedures pertinent to Project S-63 and the Follow-up were outlined by the technical committee. Using the regional manual each state prepared one suitable to the sample areas and research personnel involved.

Only the outline of the interviewing procedures manual and a general description of the sections will be included in this bulletin. For detailed explanations and a copy of the manual, refer to Southern Regional Technical Committee for Family Life, Research Report--Baseline and Experimental Phases, Information Series 1 (Refer also to publications in Appendix D).

(OUTLINE AND BRIEF DESCRIPTION)

INTERVIEWER AND PROCEDURES MANUAL

Follow-up Study on the Influences on Occupational Goals of Youth from Three Subcultures in the South (S-63)

I. Introduction (Encouragement for the interviewer to become familiar with the purposes of the original project along with sentences about items they might be encountering before the interviewing process was completed were included in the introduction. The intent was to help the interviewer work comfortably and efficiently realizing that the success of the project depended on their success in securing data while encountering as few problems as possible.)

II. Background and General Purposes of the Study (This section included general statements about the importance of such a study, the purpose of the original study, the fact that a sample of fifth and sixth graders and their mothers in seven states had completed the original questioning, and that the purpose of the follow-up was to determine if change or persistence in aspirations and expectations existed over a six year period. An explanation was given to the interviewer about how the questioning would be done, why it was important to do a follow-up to determine change as the youth had grown, and how the follow-up would be accomplished through administration of the youth questionnaires in the schools in which the original sample members were then attending, and through interviews with the sample mothers.)

   A. Detailed Purposes of the Project (Several general purposes of the project were listed in order for interviewers to have some concise phrases they would know to relate to youth and parents who might ask specifics about the project.)

   B. Geographic Scope of the Study (The area locations within a given state and the fact that several other states were conducting the same study was included in this section. The benefits of combining state data into regional efforts were briefed.)

   C. General Description of the Sample (The number of mother-child pairs originally located in each state were reported, and the fact that a subsample of mothers would be followed-up was included.)

III. Your Part in the Study (The importance of interviewers and their efforts in order to make a project successful were briefed.)

   A. To Locate the Homes of the Mothers in the Families Assigned to You (This section described the content of an interviewer packet which included an information sheet with directions for locating the homes of each of the mothers to be interviewed.)

   B. To Contact the Mother for an Appointment and Enlist the Cooperation of the Mother of the Sample Family (To aid the interviewer in telephoning for appointments, making introductions, specifying their connection with the university, recalling the previous visit in the original interview phase, and in explaining the purpose of the project, sample conversational paragraphs were included in this section. The interviewer was given hints on how to secure the interview and handle potential refusals.)

C. To Administer the Prescribed Interview Schedule to the Mother (On the assumption that most interviews would take place in the mothers' homes, the issue of privacy and trying to have a comfortable location without interruptions was described. In administering the interview schedule, the interviewer was instructed to read aloud all questions and to try general probe questions to get a pertinent response whenever a respondent may have answered "don't know", or seemed undecided.)

D. To Record Any Supplementary Information that You Feel Might be Helpful in a Better Understanding of the Situation (In this section interviewers were instructed to write down additional information or any explanatory notes from their observation that might be pertinent to researchers' understanding a case or interpreting the results.)

IV. Your Responsibilities as an Employee (Interviewers were advised that county school personnel had been contacted about their work in the community.)

A. Working Hours (Interviewers were urged to adjust their working hours to the times of day that they were most apt to find respondents available for an interview.)

B. Confidential Information (Confidentiality in general was discussed along with the fact that in the very small communities in which many of these interviews were conducted, it was very important for the interviewer to build a trust relationship with the respondents.)

C. Care and Stock of the Materials (Interviewers were told about securing supplies and what to do with completed interviews after finishing their assignments.)

V. Interviewing and Interviewing Techniques (The section on interviewing techniques included general information--somewhat in textbook fashion --helpful to the interviewer in understanding the interviewer's job, the characteristics of an effective interviewer, the privacy of an interview situation, making appointments and rapport setting with respondents, ways to introduce the study briefly, and how to meet cooperative and uncooperative respondents. Information was divided potentially into these sections:

A. The Interviewer's Job
B. The Interviewer Him/Herself
C. An Interview is a Private Affair
D. Making Appointments
E. Putting the Respondent at Ease

F. Making the Introduction
G. How to Meet the Parent Who Does Not Want to Cooperate

VI. Description of the Interview Schedule and Specific Instructions

A. Cover Sheet (The fact that addresses, phone numbers and the original school assignment were already precoded on the questionnaire was discussed.)

B. Items that Respondent Reads (Descriptions for using cards with the respondent while asking questions was described along with the particular items and the number of cards necessary for completing those items.)

C. Instructions for Specific Question (Items requiring specific questions were detailed.)

D. Names and Code Numbers (Since names and code numbers from the previous study were included on the questionnaires used in the interview, the interviewer was given sample conversational paragraphs to use in case respondents inquired about the use of names and numbers and how this might be in violation of confidentiality.)

VII. Instructions for Administering the Mother Schedules (Interviewers were reminded of the importance of administering all interview schedules in exactly the same way to all the persons being interviewed in so much as possible. Caution was given about reading items as printed and not rephrasing questions or changing words which might result in a different answer.)

A. Administration of the Mothers' Interview Schedules

1. Preparations of Schedules (Definitions of the notations used for indicating residence status, school of original sample, sub-sample status for mothers, and whether or not the young person had dropped out of school since the original survey were explained.)

2. Length of the Session (Time estimates for the one-session mother's interview were discussed.)

3. Administering the Schedule

(a) Introduce the Session (Sample conversational introductory phrases were listed for the interviewer's use in developing a comfortable style for beginning the interview session.)

(b) Reading Items (Suggestions for reading various items were outlined.)

(c) Handing Cards to the Respondents (Details were given for using cards so the respondent could read along as the items were presented by the interviewer.)

(d) Pacing the Presentation (Suggestions for picking up on cues from the respondent about reading pace and making necessary adjustments were included.)

B. Terminating the Interview (Ways to end the interview situation, make comments suitable to the situation, and make a departure were suggested.)

VIII. Instructions for Administering the Youth Schedules (Since some of the youth were absent from high school on the day of school administration of the surveys or they may have dropped out of school and/or moved since the original study, the interviewer was instructed about locating and interviewing these sample members.)

Records (Details for the interviewer payroll records and pay periods were included in the procedures by each state along with plans for returning completed interview schedules.)

APPENDIX D
Additional Research Reports

Major publications, unpublished manuscripts including theses and dissertations, and groups to which papers were presented during the history of this project are listed in this section.

Additional Research Reports

Over the entire study of this particular longitudinal sample, findings have been disseminated to professionals in several different ways, nationally and internationally, through publications and paper presentations (numbering 40) to different regional (7) national (3), and world (2) conferences or organizations. Technical bulletins (11), theses and dissertations (21) and department/university occasional papers (25) contributed to this dissemination. At this writing several additional journal or bulletin manuscripts are either in progress, review, or in press. A list of major publications, theses and dissertations, and a list of organizations where papers have been presented is included in this section. Lists of other works may be secured from the editors of this bulletin.

Regional and State Bulletins

Southern Regional Technical Committee for Family Life (March, 1973). Program plans for group meetings--influences on occupational goals of young people in three Southern subcultures. AES Information Series II.

Southern Regional Technical Committee for Family Life (1974). Research report: Baseline and experimental phases--influences on occupational goals of young people in three Southern subcultures. AES Information Series I.

Southern Regional Technical Committee for Family Life (1984). Dynamics of life plans and attainment: Procedural guidelines and interviewer's manual for longitudinal research. Unpublished mimeo. Pp. 47.

Southern Regional Technical Committee for Family Life (1984). Training interviewers for the follow-up process. A one-hour video tape.

Southern Regional Technical Committee for Family Life (1984). Dynamics of life plans and attainment: How to conduct an indepth interview. A one-hour videotape with sample interviews.

Kuipers, J. L., Southworth, L. E., & Reed, H. M. (March, 1979). Occupational and educational goals of rural Appalachian children and their mothers. University of Tennessee, Knoxville, Tennessee Agricultural Experiment Station, Technical Bulletin No. 588.

Shoffner, S. M. (December, 1975). Influences on occupational goals of young people in the North Carolina Appalachian area- baseline data and action program, North Carolina Agricultural Experiment Station, Technical Bulletin No. 233.

Tillman, C. D. J., & Woods, A. B. (1985). Educational aspirations and expectations of students in three Mississippi schools. Lorman, MS: Alcorn State University, Division of Agriculture and Applied Sciences, Research Bulletin 23.

Tillman, C. D. J., & Bates, A. (1985). Low-income youth's self-concept in four schools in Mississippi. Lorman, MS: Alcorn State University, Division of Agriculture and Applied Sciences, Research Bulletin No. 30

Tillman, C. D. J., and Bates, A. (1983). A comparison of educaitonal and future plans of students in four Mississippi schools. Lorman, MS: Alcorn State University, Division of Agriculture and Applied Sciences. Research Bulletin 25.

Books and Journal Articles

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Kenkel, W. F. (1980). Occupational saliency and age at marriage plans of low-income high school girls. *Sociological Forum*, *3*(Fall), 62-74.

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Kenkel, W. F. (1982). Middle childhood antecedents of age at marriage expectations of low-income high school girls. Sociological Focus, 15(1), 53-65.

Kenkel, W. F., & Gage, B. A. (1982). Race and sex differences in attitudes toward working wives among low-income youth and young adults. Free Inquiry in Creative Sociology, 10(2), 150-153.

Kenkel, W. F., & Gage, B. A. (1982). Life's predictable unpredictables and the life plans of youth. Sociological Spectrum, 2(3-4), 307-314.

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Peterson, G. W., Southworth, L. E., & Peters, D. F. (1983). Children's self-esteem and maternal behavior in three low-income samples. Psychological Reports, 52, 79-86.

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Arthur, G. M. (1969). *Family authority structure and achievement motivation*. Unpublished masters thesis, University of Kentucky, Lexington.

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Wilson, S. M. (1985). *Predictors of life satisfaction among young adults from low-income, rural areas of Southern Appalachia*. Unpublished doctoral dissertation, University of Tennessee, Knoxville.

Zumbro, M. E. (1973). *Educational and occupational aspirations and expectations of rural elementary school children in East Tennessee*. Unpublished masters thesis, University of Tennessee, Knoxville.

Papers Presented

Papers have been presented to the following groups:

American Home Economics Association
American Sociological Association
Association of Research Directors, Research Symposium
Conference on Appalachian Children and Families (Second through Fifth)
Conference of the Research Committee on Youth Sociology (Germany)
Mid-South Sociological Society

National Council on Family Relations
National Endowment for the Humanities, Lecture Program
North Carolina Home Economics Association
North Central Sociological Association
Northeast Sociological Association
Southern Association of Agricultural Scientists
Southern Sociological Association
World Congress of Rural Sociology (Fourth Congress in Poland, Fifth in Mexico)